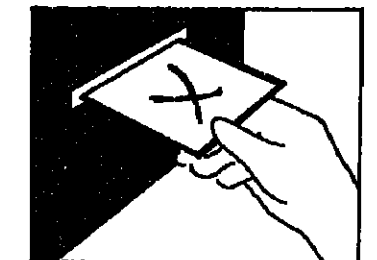


Will librarians be left on the shelf in the new mating game of information technology? Adriana Caudrey looks at conflicting views of the future of ACADEMIC LIBRARIES and the books and journals that fill them (page 13)



Two nations? Or more? After years on the sidelines **ELECTORAL GEOGRAPHY** has become a major tool in political analysis. R. J. Johnston examines its impact and findings (page 16)

"The stone as roll not heap up not foam". The professor Robert Gibson discusses the **PHRASE-BOOKS** in the English, an article worth the acceptance of the studious persons (the page 17)

ARTS: The Emperor's warriors march on Edinburgh... Magdalena Jettolova at the Riverside and Arnolfini... Stanley Wells in Stratford (page 18)

"This long disease..." Few English poets ever achieved such a balance of classical perfection and anguished self-expression as **ALEXANDER POPE**. John Dixon Hunt reviews Maynard Mack's biography of the bard of Twickenham (page 19)

Magma, planetary rings, microfossils, oceanography, agriculture and exploration. Three pages of books on **ENVIRONMENTAL SCIENCES** (pages 28-29)

Home news	1-8
Patrick Nuttgens	2
Letters to the editor	2
Don's Diary (Colin Barron)	4
Antithesis	5
Union View (NUS)	6
Overseas news	9-10
Union View (Canadian Association of Teachers)	10
Articles	11-17
Arts	18
Books	19-26
Environmental sciences books	23-26
Noticeboard	28
Classified advertising	29-35

NEW WEEK

The rape of Abyssinia
Philip Hobsbaum on
D. H. Lawrence
The Saturday morning Ring
circle
Bookends: Evelyn Fox Keller's
Gender and Science

© TIMES NEWSPAPERS LIMITED, 1985
Printed by Times Newspapers Ltd., P.O. Box 7, 200
Gray's Inn Road, London WC1X 8EZ, England.
Typesetting by Computer Graphics Ltd, 37-41 Coppinger
St., London EC2A 3JF, and printing by Northampton
Mercury Co. Ltd, Upper Mount, Northampton
NN1 3HR. Friday, October 11, 1985. Registered as a
newspaper at the Post Office. ISSN 0950-9230.



HIGHER EDUCATION SUPPLEMENT
Priority House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

Academy and business

Business schools occupy an awkward position within higher education. Part of the trouble is the semi-autonomous relationship which they have with their parent institutions. Some critics claim that business schools suffer all the inhibitions produced by this larger institutional affiliation and enjoy few of the benefits, in marked contrast to medical schools where the balance of advantage is the other way round. Part is that management education cannot rely on the solid foundations of professional and scientific expertise which underpins the role and status of lawyers, engineers and doctors within the university. In the eyes of many, management is a rag bag of academic discipline, professional skill and practical experience.

Another worry is that much of the paraphernalia of business schools was imported from the United States during the 1960s. Some would say that too little account was paid to the differences in business culture and the arrangement of higher education on opposite sides of the Atlantic and too much of American business school practices were uncritically applied to different and even unrecognised British circumstances. Here criticism has often focused on the two-year MBA (Master of Business Administration). Was this the best vehicle for the large scale development of postgraduate management education in Britain?

But the most immediate if not the most important reason for the institutional awkwardness from which business schools suffer is that they occupy a sensitive sector of the front line between higher education and industry, to say about the content of management education, except to stigmatise it in general terms as the product of a risk-averse culture.

So not only do the two documents have no recommendations in common, except that both would like business schools to have more freedom to determine their tuition fees, they appear to have little common content. For CUMS the future of management education is composed of issues such as the viable size of business schools, student ratios, the quality of management education, regional balance, credit transfer and so on. For Professors Griffiths and Murray it is about privatization, the big bang solution to business schools' ills.

It requires little insight into the gut politics of 1980s Britain to predict which of these two documents has had the larger impact. Privatization has been taken very seriously by the Department of Education and Science. The Secretary of State has written to more than 100 companies to ask for their views of the scheme, and also to the heads of business schools presumably so that they can prepare their pleas of mitigation in good time. On Monday a conference was held at

Gresham College in London to discuss the proposals made in *Whose Business?* Among those attending were the permanent secretary of the DES, the chairman of the University Grants Committee and the heads of most major business schools.

However the political sensitivity of the privatization plan put forward by Professors Griffiths and Murray does not mean that it therefore monopolizes the agenda for future policy. At one level, that of the detailed evolution of management education, it is the CUMS document not *Whose Business?* that has set out the effective agenda. After all credit transfer is a lot easier to do something about than a risk-averse culture. At another level, that of the political future of business schools, the Griffiths-Murray proposals may well be used merely as a stalking horse behind which quite different plans for the future can shelter temporarily.

Just as it requires little insight to guess that politicians would find *Whose Business?* much more palatable than the unexciting gradualism of the CUMS document, so it is easy to predict that they will show a keen interest in living business schools off from universities while remaining sceptical of the practicality of complete privatization. Indeed they may even question the desirability of such privatization, which would remove all significant political influence over the future shape of business schools. So a not unlikely outcome might be that business schools ceased to be parts of universities and were removed from the UGC grant list, and became instead direct-grant institutions funded by the DES or the Department of Trade and Industry.

If this is the real agenda for change that lurks behind the *Whose Business?* stalking horse, then the debate should concentrate on the first part of the Griffiths-Murray plan, the hiving off of business schools. Their wilder dreams of privatization probably serve only as a diversion. If universities want to hang on to their business schools and if business schools want to remain part of their universities, now is the time to build a persuasive case. Such a divorce would impoverish both partners. Independent business schools would find it more difficult to gain access to the larger intellectual capital possessed by parent universities. In particular they would risk cutting themselves off from the high-tech developments with which science and engineering departments will be so intimately involved. Universities in their turn can hardly afford to let their business schools go without a struggle at a time when they are so anxious to build closer links with industry and to develop continuing education, both processes in which business schools will play a crucial part. A little awkwardness seems a small price to pay for such substantial mutual benefits.

Salaries in limbo

and colleges have been offered and have accepted an offer of 7 per cent extra from December.

The Department of Education and Science has not even offered a quid pro quo, an over-cash limit settlement in exchange for the limitation of tenure, or differential salaries. At least the school teachers have been offered the prospect of more money if they will agree to new conditions of service. The Association of University Teachers has been offered nothing that they can either spurn, as the National Union of Teachers has done, or turn to their advantage, as the National Association of Teachers in Further and Higher Education has done.

Perhaps ministers and their advisers feel that the AUT's threat of one-day strikes is so puny that it can be safely ignored. Having decided to ride out the much more serious political storm created by the school teachers' action they are unlikely to be shaken by any symbolic strikes that do not lock any children in the street or have any parental evenings. Maybe they believe that they can secure the

changes they seek in the structure of the university teaching profession without entering into serious negotiation with the AUT. Sir Peter Swinnerton-Dyer, the chairman of the University Grants Committee, told a conference of business schools on Monday that the pack-ice of uniform academic salaries was beginning to break up. So why reward the AUT for agreeing to the inevitable?

The trouble with such amoral optimism is that it exaggerates both the ease and the speed with which old rigidities will melt. Sir Peter's pack-ice could easily refreeze in an even more constricted pattern. But a much more serious objection is that it ignores the erosion of morale in the profession that such an approach inevitably produces. Serious negotiations must be held on the AUT's 1985 salary claim. Both the AUT and the DES must accept that measures to restore the erosion of university salaries and to lock any children in the street or have any parental evenings. The alternative is galloping demoralization, as serious as anything that is taking place in schools.

Laurie Taylor



No need for everyone to squish up there by the door. Plenty of chairs down here at the front. That's the idea. Look, could someone have a deco down the corridor and see if there are any more latecomers. Everyone here? Excellent.

Well, may I start by welcoming you all - I'm sorry, could you move forward to let the latecomers through. That's right. Yes, could I start by welcoming you all to the Department of Communication and Media Studies. My name is Quinton - Doctor Quinton - and I'm chairman of the first year committee, which means that every year at the time it's my job to run over a few aspects of university life which might have escaped your attention during these busy first days of term.

Let me say straight away that it's, as usual, extremely pleasant to see so many young and eager faces. Yes indeed. Most of you, of course, are just 18 years old, that is to say, born in 1967. Only this morning I was doing a little calculation and realized that everyone of us here in the Department of Communication and Media Studies with the exception of Maureen our Departmental Secretary - incidentally, that's Maureen over there on the right - must remember to pop along and see her if you've got any queries whatsoever about timetable or room changes or accommodation or grants or any little nagging problem about health, personal relationships or academic progress - yes, I was doing a little calculation and realized that everyone of us here was beaver away in this very department on the day you were born. That is unless, of course, your birthday happened to fall during any of the long vacations. But don't run away with the idea that that makes us a load of old fogies. Not a bit of it. You'll find this department for all its long years of experience is still very young at heart. Oh yes. So let's get down to a few specifics. Anyone here interested in sport? Football, cricket, athletics? Anyone? Jolly good. Well, if you fancy yourself as a bit of a Stanley Matthews or Len Hutton then do pop over to the Sports Centre which is just behind "Stink" - that's the chemistry department. And any budding Roger Bannister will find the track on the large open space of ground behind the notice board saying Science Park. OK?

Then on the entertainment side you'll find that it's only a five minute taxi down the road in the old jalepy to the pictures or 20 minutes flat if you're stuck, as I know some of you are, with Shank's pony.

And a couple of words of caution about other forms of entertainment. We're not here to moralize, but if by any chance there is a slip-up and someone gets in the club, then do money over and have a natter with your tutor before doing anything silly like popping the question or shooting up to Gretzka. OK?

In fact there's a minimum of rules here. Just enough to enable people to live together without too much aggression. So keep your gramophone and wire less at a modest level, leave your legs behind when you turn up for a seminar, and no hanky panky in the residential block after the witching hour. Right?

And that's about it. During these early days everything is going to seem a little strange, but whatever you do, try and keep your pecker up. You'll find a few words from your head of department - someone you may already know from the recommended pre-university reading - Professor Gordon Lapping, Roger and Over.

The Times Higher Education Supplement

October 11, 1985 No 675 Price 65p

UGC lays down the law on funding policy

by Ngaio Crequer

The University Grants Committee has ruled out rewarding excellence in teaching when it applies its new rigorous scheme for the funding of universities.

But for the first time universities will have to conform to standard limits on spending per student and staff: financial ratios if they are to escape financial penalties.

These are elements of the proposed "resource allocation model" which the UGC has been devising over the summer and which will help them to exercise greater selectivity in funding. They have decided that evidence is not available on which to judge teachers' performance.

Today the UGC and Committee of Vice Chancellors and Principals meet to discuss the implications of the new scheme which now exists in draft form.

The key role in the scheme will be played by UGC subject subcommittees, backdated after the 1981 cuts exercise for their out of date information.

They will make crucial decisions, allocating student numbers and resources for each of the 37 "centres" or subjects (such as chemistry, or law or civil engineering).

The intention is for the UGC to move from "informed prejudice" to a more formula-based system of allocating its recurrent grant, but also allowing much more room for intervention by the UGC into a university's financial affairs.

The model assumes a teaching resource common to all universities, that is, it will be assumed that electrical engineering, say, costs the same to teach at all universities. More expensive universities will need to find the difference themselves.

The research resource will be broken down into a formula to include a "floor" provision, plus an amount based on research council income, plus an amount based on UGC judgements about research plans.

The main UGC committee will make decisions about total student numbers and their distribution by subject and category (ie undergraduate, taught and research postgraduate). The subcommittees will then allocate the numbers to institutions.

Although there will be a formula for calculating research income the committee might be able to ignore particular research grants in applying the formula.

Still undecided is how much UGC

money will be set aside for each factor. But the subcommittees will say for each subject how resources are to be divided between teaching and research. They will use the 1969 CVCP estimate that an academic spends 30 per cent of his/her time on research.

For each subject the subcommittee will decide on a formula for dividing the research "floor" between institutions. This would depend roughly on student numbers and would probably include overseas students.

Allowance would be made for special factors, such as London weighting, or costs of art galleries and museums. The UGC would take specific account of institutional diversity in role and mission and shifts of numbers and resources between subjects would only take place by conscious decision, not because of automatic application of the model.

At the final stage the UGC would add together, for each university, the numbers of students and sums of money assigned for each factor and then consider the result for each place.

Still to be decided is how much the UGC will tell universities about how the eventual sum was arrived at, and what judgements were made about particular research.



Indicting a cut rather than receiving one: a welcome change of role for Mr Phil Woolas, president of the National Union of Students. His task this week was to assist with a trim for Mr George Galloway, director of War on Want, to promote a fundraising campaign by hair salons throughout Britain which has raised more than £20,000 for the charity's Ethiopian appeal.

Fees still remain an obstacle to greater student mobility

by Carolyn Dempster

There was little movement at the pre Unesco meeting of Commonwealth education ministers in Sofia, Bulgaria, this week, with full-cost tuition fees and charges remaining the main stumbling block to increased student mobility.

However the conference did support the recommendations of the *Fourth Report of the Commonwealth Standing Committee on Student Mobility*, singling out those which will assist developing countries without requiring a major reversal on fees policy by Britain.

The recommendations include the greater use of preparatory courses and the development of distance learning to reduce the economic burden on both students and their countries, and the strengthening of institutions outside Britain to provide alternative centres of excellence.

In a joint statement issued by the ministers at the end of the meeting, attention was drawn to the gravity of the continuing fall in the level of Commonwealth student interchange. The standing committee reported a 1 to 2 per cent drop in the first year of the triennium 1984/87.

However, the meeting failed to endorse the committee's recommendation of a targeted 3 per cent growth in student mobility by 1986/87 which would give rise to an additional

6,000 students moving within the Commonwealth and a total interchange of 72,000 students.

Instead, there was support for the view that individual governments should look into awards, shared funding arrangements, fee levels, quotas and reciprocal exchanges and schemes to encourage a greater flow of students to developing countries.

The time has come, the ministers also said, when it would be appropriate to consider the launching of new Commonwealth initiatives in the field of open learning. To this end a report is being prepared for presentation to the Tenth Conference in Nairobi in 1987.

Sir Roy Marshall, chairman of the standing committee, and former vice-chancellor of Hull University confirmed that Britain and the richer Commonwealth partners had come under increasing pressure at the meeting over the fees issue.

"We are dealing here with an area where it is very difficult to balance what is of domestic concern and what is of international concern".

As expected, Mr Peter Brooke, under secretary for higher education did not give any sign of a change in stance on formal policy, but in the view of certain of the delegates to the meeting, there was a very much greater awareness of the need for review and co-operation.

Scotland and Wales face more job losses

by Peter Aspdin and Olga Wojtas

Universities are once again threatening substantial academic job losses - including redundancies - as they take stock of their financial predicament following the last round of University Grants Committee cuts.

Institutions in Scotland and Wales are the latest focus for attention, as policy committees and senates have been debating drastic cost-cutting packages which call for savings of millions of pounds.

A confidential University's policy review committee recommends axing 35 academic and 40 non-academic posts. The plan, which has yet to go before the court or senate, also recommends closing the music department and the archaeology museum, and selling the botanical gardens. The UGC told St Andrews to axe its archaeology and music courses in 1981.

St Andrews' principal, Dr J. Steven Watson, stressed that this was "the blackest picture" adding: "We are honestly presenting to the UGC what would happen if they push through the programme so far announced without any remedial action on our side".

He was confident that St Andrews could attract further funding from overseas students' fees, but said the university was also seeking Government backing for increased home stu-

dent numbers, due to fall below 3,000 over the next three years.

Strathclyde's university court this week approved a plan for savings of £2.8 million by the end of the decade, which proposes the loss of 65 academic and 50 non-academic posts.

The scheme, drawn up by a special planning group from all the faculties, was also to be considered by the senate later in the week. It proposes 24 job losses in Strathclyde's smallest faculty, arts and social studies, and earmarks as vulnerable the departments of geography, sociology, urban and regional planning, metallurgy, forensic science and the pay and rewards research unit.

The Strathclyde situation has been confused by its recent commitment to a large capital project, the £12 million refurbishment of its main Royal College building, using 4 per cent of its recurrent grant for its share of the scheme, between £5 and £7 million.

Detailed plans of the scheme have not been widely circulated and the unions are to be consulted for the first time today.

Mr David Bleiman, the Association of University Teachers' Scottish regional official, said: "We still haven't been given sufficient information to make any judgement about the matter, which puts us in an impossible position when we know the cost of the project in terms of jobs probably amounts to

continued on page 3

Tory grants review dilemma as loans pressure continues

by David Jobbins

The fate of the Government's promised review of student financial support hung in the balance this week.

Ministers have said to decide whether to press on with publication of a discussion document in the wake of the Cabinet's emphatic rejection of student loans earlier this summer. They are considering whether there is any point in publishing a review which leaves out loans or whether their best option is to let the whole affair quietly die.

All the preparation for the review has been completed. The review was

promised by Sir Keith Joseph, Secretary of State for Education and Science, after the Government's U-turn on tuition fees last winter.

But Mr Peter Brooke, under-secretary for education and science was strictly non-committal about its future when questioned during the Conservative Party conference in Blackpool this week, although the Department of Education and Science has previously predicted publication by the end of the current parliamentary session in less than a month's time.

Sir Keith was forced to retreat in the face of determined back-bench opposi-

tion to his proposal on tuition fees and announced that loans would be up for consideration once more as an integral part of the review.

A failure to produce the review will effectively isolate the Government by suggesting a vacuum in the face of the alternative strategies emerging from the opposition parties.

The Liberals are understood to be close to completing their alternative green paper while the committee set up by Labour under Lord Glenamara, the former education secretary, is also nearly finalized.

Both are expected to criticize the

way the Government has allowed higher education grants to fall behind real student costs and to argue the case for a comprehensive system of support for students in non-advanced further education.

But speaking to Conservative representatives at a Tory conference fringe meeting, Mr Brooke was highly critical of Labour's embryonic proposal for a minimum grant to all post-16 students.

At £30 a week this would cost an extra £500 million and this was ruled out in the present economic climate, he said.



When this column appears I should be in Paris making an honest man of myself. That may seem an odd place to go for that purpose, especially for a weekend, so I should explain that I shall be delivering a lecture on the Saturday morning and looking around the city on the Sunday. The honesty concerns not the lecture but the few buildings I shall be able to visit over the weekend.

The fact is that while there are many artistic experiences it is possible to have - even if a bit attenuated - by proxy (some modern reproductions of paintings seem to me even better than the original) it is impossible to get the full savour of a famous building without visiting it. And that ideally means inside as well as outside. It was said last year by Professor Richard Cobb when judging the Booker Prize that he had not read any Joyce or Proust. That is incomprehensible to me; you can, after all buy cheap editions of both and you don't need to read the first edition! But it is very difficult to understand a building from photographs or even from plans.

I have therefore made a point as an architectural teacher of not lecturing about buildings I have not seen. Until the last few years. Within the last quinquennium I have published two books (and edited a third) on the architecture of the world. One was the Mitchell Beazley Pocket Guide to World Architecture (all the significant buildings of the world, illustrated by drawings, in 192 small pages) which has only one significant error that I have discovered - the wrong caption to a drawing. The other was *The Story of Architecture*, following Comenius's *Story of Art* for the same publisher. That has 288 larger pages, even more illustrations and, inevitably since it is a discursive study, more errors. Only one of which I feel deeply ashamed, caused by cutting a too long paragraph carelessly (editor's fault, of course) and accidentally changing the whole meaning. What was particularly galling was that it concerned a building which I know well and have explored many times. I refrain from saying which it is.

The Parisian case that makes me feel guilty is the Pompidou Centre by Piano and Rogers, which I have never seen, despite talking about it endlessly. So I shall hurry there to discover if it is really rotting away in its youth with untold diseases and is as distastefully interesting inside as the plans suggest. What excites the people who have raved about it to me is the exterior and the fire enters outside in the square. Whatever its defects it must be a seminal building. It can be argued that, compared with historical examples, a modern building is upside down, back to front and inside out; the Pompidou is the supreme example of the last characteristic.

It occurs to me that all the subjects about which I write and argue require personal visits. How easy for those scholars who only have to find a library. On the other hand, the rewards for me in having to visit the originals are incalculable. There is no way you can properly appreciate stained glass windows, for example, without seeing them in their setting. It is also important to see them in different weather conditions and at different times of the day. But wait a minute. Before I persuade you to ignore the library and visit all the buildings, there is of course a compensation. If you can't travel all over the world, you can buy my books. I am sorry to have to say that copies are still available.

Patrick Nuttgens

Letters to the editor

The extramural dilemma

Sir, - The report and subsequent correspondence concerning the recent exchange of views at Oxford between Noel Thompson of the Department of Education and Science and senior members of extramural studies departments (*THE*, September 20 and 27) appears to me to go past the main point. The set of questions asked of those in extramural studies was legitimate and pertinent, and helpful in the sense that Roger Fieldhouse has indicated.

The problem is, however, a structural one, enshrined in a staffing approach that is based in the old, not the radical and unpopular new, formula. An agonized debate about the role of extramural studies, and the shortcomings implied by Thompson, goes back decades rather than months. Neither this Government nor its predecessors is now in order, on either side.

The effect of ear-marking funds for a wide range of extramural subject tutors has been to encapsulate and

marginalize liberal adult education: the university's duty is done, conscience cleared towards the local community, and the influence of extra on intramural policy and work minimized.

Old and sterile dichotomies - liberal/vocational, credit/non-credit - are perpetuated and extramural work is stigmatized as of lower quality. Whereas adult education and extramural studies departments are desirably concerned with all aspects of the education of adults, Pickup work now tends to be located elsewhere in the parent institution.

The liberal tradition and valuing of equity becomes more encapsulated, attenuated and starved of resources at the very time that universities, facing the demographic decline of the 1990s within the increasingly inequitable society symbolized by Handsworth and Brixton, need these values, not to mention access to more potential "mainstream" adult student, more

than ever.

University adult educators have themselves analysed these matters and recommended much closer integration of extramural effort within the parent institution: witness Crombie and Harries-Jenkins's *Demise of the Liberal Tradition* recently published that fine traditional liberal department, DACE Leeds. It is a pity the new formula is combined with a substantial reduction in support for extramural work, and devices calculated to foster a competitive struggle for survival.

It is, I suggest, the cuts and the crude competitive element which are at fault, not the new formula itself which, with adaptation in the light of experience, could become a device for widening the impact of responsible body funds on the whole university.

Yours faithfully,
CHRIS DUKE,
Department of Continuing and Adult Education, Warwick University.

Stately role

Sir, Rodney Barker (*THE*, October 4) appears puzzled by the contrast between the present Government's "interventionist" approach to education and its laissez-faire attitude to business.

Were he not the author of *Political Ideas in Modern Britain* I could understand his dilemma. But he should know, better than most, that the doctrine of national individualism which this Government professes is supposed to combine the coercive power of the free market in industry with that of the nation-state in every other field.

Thus high defence expenditure, the curtailment of local government and of trade union power, the role of the state as executioner, disciplinarian and morality-enforcer, coupled with such things as dislike of Unesco, hostility to the BBC and the imposition of disciplinary fees upon overseas students - all these are perfectly consistent with "free enterprise" simply because the latter is presumed to work in the national interest.

The present Government is not, and should not be, opposed to state power on principle, especially when that power is wedded to its concept of the nation. Opposition to this has always come from the radicals and from the left. The author of the statement "Where there is freedom, there will be no state" was Lenin, not Sir Keith Joseph.

Yours faithfully,
BRIAN THOMAS,
Principal Lecturer in International Relations, Polytechnic of North London.

Ballot call

Sir, - AUT executive did not decide to ballot on a strike (*THE*, October 4), but only to call an emergency council; that will decide whether to hold a ballot at all. There is a difference! The long delay will give some hope that no strike will ever be held. Must the government impel down the road few want to travel?

Yours etc.,
J. G. WATSON,
Alding head, Department of English, Queen Mary College, University of Oxford.

One too many

Sir, - May I correct an error of fact in the Don's Diary of September 20? Revenues derived from the American students taking courses in the English department at Queen Mary College have enabled the department to increase its teaching strength by the equivalent of one-and-a-half full-time staff members, not two-and-a-half as stated in the Diary.

Yours faithfully,
A. D. MILLS,
Acting head, Department of English, Queen Mary College, University of London.



Extra message

Sir, - I accept with reservations the reprimand in Roland Hurst's "Making the media, mistaking the message" (*THE*, September 27).

In his article he refers to the copy in a Pilkington advertisement and asks: "If some acknowledgement of the university's primary role in devising and developing the product had been given - however casual the reference - would Pilkington's public image have suffered the slightest wrinkle?" The answer is a considered, not an automatic, "no".

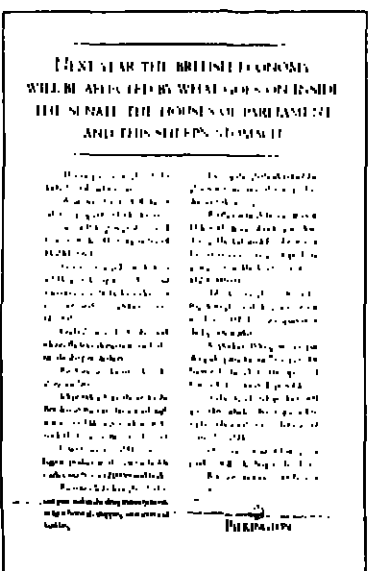
A recurring issue for advertiser and copywriter is to what extent can an advertisement admit subsidiary messages, of whatever kind, without obscuring its principle one? In devising the sheep advertisement, about which Roland Hurst is otherwise complimentary, we chose to omit reference to what we acknowledge as the primary role of Leeds University because, and however selfish our judgement, it would have interfered

Business as usual

Sir, - The conclusion drawn in your excellent letter "Academy and Business" (*THE*, October 4) that business schools should remain within and part of universities is surely right - for one overriding reason.

The university education of scientists, technologists and engineers (STE) in all our competitor industrial countries has for many decades and with great effectiveness included a generous cross-section of the disciplines we associate with management education. At long last some of our equivalent STE programmes have followed suit, sometimes, let it be said,

against the inclinations of some of their faculty - and in those universities concerned the business schools and management centres have played an important part in bringing about this essential change.



with the clarity of what we wished to convey.

In public announcements we made at the time we launched our first soluble glass product and which pre-dated the advertisement, we gladly gave the university the credit that it merited. Ironically, the advertisement was subsequently altered to allow a credit for the distributor, an alteration I accepted with great reluctance.

We are proud of our record of co-operation with British universities from which mutual benefit has derived. We would certainly consider using a symbol denoting university co-operation, but the effectiveness of such pick-a-back devices declines quickly over time.

Roland Hurst's call for vivid and realistic projection of the university system offers a more effective, and more expensive, prospect of advancing its reputation.

Yours sincerely,
DAVID B. WOOD,
Group Communications Adviser, Pilkington Brothers plc, St Helens, Merseyside.

Architectural complexes

Sir, - How reassuring it is for those of us in architectural education to have our complexes massaged once again. We will miss it when it stops. Your piece "HMI slates 'indulgent' architecture courses" (*THE*, September 27) publicizes a report which is rather more an indulgence by its illustrious authors than an exposure of that sin in us.

HMI inspectors who visit architecture courses are technologists by training or persuasion and would appear to wish their own methodology on architectural education. This is not, surely, the function of an inspector. Dismissive reference is made in its report to "creativity" and there is obsessive concentration on technological prowess. This is yesterday's conversation. We may paraphrase Cezanne and ask "if technology is the answer, what was the question?" The notion that technology is an equally independent of, even antithetical to, creativity is an anachronism. The inspectors didn't just miss the mark, they aimed at the wrong target.

The barely hidden main agenda for this report is, however, the assault upon the five-year maintained status of architectural courses. There is a good case to be argued for an extension of part-time education and a pedagogic role for "master" practitioners. Few would argue that the present transition from academic to customary activity is satisfactory. The debate is continuing and how said that the inspectorate do not contribute. It is certainly as possible to legislate positively in support of part-time education (currently rewarded at 40 per cent the equivalent full-time rate and requiring teaching in unsocial hours) as it is to wield the fiscal axe. How refreshing it will be when constructive educational arguments precede and inform those wailing the axe.

The inspectorate doesn't spare the Royal Institute of British Architects' Architects Registration Council of the United Kingdom visiting board either! Its activities, it claims, will be improved if non-architects are included. Maybe, but on what evidence? This issue has been debated at length by ARCUK and the RIBA and the arguments exposed. The case was not proven. If the inspectorate, now established almost to a man, had wished to establish the case, their report, based on secondary sources and sadly out of touch, squandered the opportunity. Many of us will regret that failure.

Educationalists in architecture welcome constructive criticism and debate. It is a sad reflection that HMI has not only failed to contribute to the debate but also appear quite ignorant of the high regard in which the UK architectural educational system is held world-wide, whose students are fully employed and practise with distinction, and whose educators are a net export. Whoever is next to the assault, please note.

Yours sincerely,
ALLEN CUNNINGHAM,
Head of architecture, The Polytechnic of Central London.

Alliance policy
Sir, Your issue of September 27 invites invidious comparisons. The page one lead was on Labour's plans which may be announced later this year (a leak?). Tucked away on page seven was a somewhat smaller piece on the Liberal education debate in Dundee.

The opinion polls at present put the Liberal/SDP Alliance out in a high level of support among educators. One might suppose, therefore, that your coverage is not in step with the views of your readers.

Some say the Alliance is paranoid about the negligible amount of media coverage it receives. On the other hand, as the saying goes, "Just because you're paranoid doesn't mean they aren't out to get you".

We seek consensus in politics to bring back stability in education. Balance in the media is our aim too.

Yours sincerely,
ROBIN ASHBY,
Langbrough Liberal Association, Middlesex.

Deputy v-c quits over merger

by Karen Gold

The deputy vice chancellor of Keele University has resigned over the merger talks currently taking place between the university, North Staffordshire Polytechnic and Staffordshire County Council.

Professor Donald Thompson announced his resignation to the university council this week. He did not give a reason. But he told *THE*: "It is a reasonable inference that this is because of the discussions and to distance myself from them."

He had resigned now in order not to distract attention from a report by the working group considering the merger. The group is to consider a draft report setting out various options for the two institutions at a meeting next week, and the report is likely to be published shortly afterwards.

Professor Thompson is not a member of the working group. He remains head of the law department at Keele. His resignation will fuel rumours in the university and the polytechnic that the working group is seriously considering full merger, not merely minor collaborative arrangements.

The working group was established in July, with a brief to consider "opportunities for further collaboration, including the possibility of amal-

gamation leading to the creation of a new regional university".

Keele's new deputy vice chancellor Professor Denis Dwyer said that the working group's first report would be likely only to indicate avenues for exploration. "We are still at a very tentative and initial stage," he said. "Meanwhile it is my view that at the present stage the general feeling within both institutions towards closer links is positive."

The working group's members are two county council representatives, three from the polytechnic including the director, Dr Frank Dickinson, and three from the university including the vice chancellor, Professor Brian Fender. It was Dr Fender who approached the county council to discuss links with the polytechnic not long after he became vice chancellor at Keele in March.

Lecturers at the polytechnic are worried at reports that total student numbers for a merged institution have been put at around 4,000 - half the size of the two institutions combined. A branch meeting of the National Association of Teachers in Further and Higher Education at North Staffs has expressed concern about the proposed collaboration and called for urgent clarification on possible student numbers.

Angry rivals for docks study centre

An angry protest was being lodged this week over the rival claims by two London University colleges for cash to fund a new chair in geography and a study centre for the capital's massive docklands development project.

A proposal by University College, London, to establish the new chair in geography and anthropology and set up a study centre had run into opposition from a local pressure group, the Docklands Forum.

The group has expressed anger that the £100,000 plan should be considered, since a similar scheme outlined by the locally based Queen Mary College was rejected by officials from the London Docklands Development Corporation only last year.

In November, following four years of informal discussions, Queen Mary College was told that the plan would not be pursued any further.

Throughout the discussions it had been stressed by LDDC officials that the study centre would need to be sited in docklands, despite the proximity of Queen Mary College.

Father Jim Kennedy, chairman of the pressure group has now written to Mr Christopher Benson, chairman of the LDDC asking for confirmation that the University College application is being actively considered.

New cuts mean agriculture posts will go



RESEARCH GRANTS JUST AREN'T WHAT THEY USED TO BE.

New cuts imposed in research backed by the Ministry of Agriculture will mean more than 380 extra lost jobs in the shrinking Agricultural and Food Research Council.

The AFRC's institutes and units have now been given next year's cash plans, following a £10 million cut in the Ministry of Agriculture, Fisheries and Food's research programme for 1986/87. The council receives over half its income in commissions from the MAFF, and the ministry reductions will mean new cutbacks on top of the hundreds of jobs already lost from cuts in its share of the Department of Education and Science research budget.

The council has yet to release full details, but individual institutes indicate that 150 of the new losses will be the compulsory redundancies, with the rest saved through premature retirement or freezing of vacancies.

The Animal and Grassland Research Institute in Berkshire will lose 50 posts before April 1986, to meet a 15 per cent cut in its overall budget, and the East Malling Research Station in Kent will lose 43 staff from its fruit research programme. A further 40 jobs will go from the National



Speed king: Dr Richard Levin's thesis on the monarchy of Swaziland may be a record, according to staff at Liverpool University's department of political theory and institutions. The thesis, inspired by South African-born Dr Levin's experience as a teacher in Swaziland, was completed in less than two years and awarded this month. Dr Levin and his Swazi wife Thabisi plan to return to Swaziland.

Scotland and Wales job losses

continued from front page

28 academic and 23 support staff". Up to 140 academic jobs are under threat at University College, Cardiff, and the University of Wales Institute of Science and Technology, claims a report issued by the two institutions' joint committee on merger.

It claims that the cuts are necessary irrespective of whether the merger actually goes ahead. The two institutions' financial position is so bad that, assuming an average student-staff ratio of 12:1, Cardiff stands to lose 80 to 100 jobs, while UWIST would be forced to lose 30 to 40 jobs.

The committee's report, prepared under the chairmanship of UGC chairman Sir Peter Swinnerton-Dyer, said that natural wastage was "unlikely to be an adequate means of dealing with the problem".

But the ALT at Cardiff has accused the committee of trying to evade the formal undertaking that no one will lose their job as a result of the merger, by underplaying its significance.

Could higher education have lower costs?

With the appropriate organisational structure and well-advised planning, yes.

Peat Marwick have a good understanding of the higher educational market and its financial needs. We have gained considerable experience of working in polytechnics and universities, having undertaken more than 60 assignments for educational bodies of all kinds.

In every case we have provided advice and skills to ensure that the institution is run as efficiently as possible. That means reviewing operational and administrative efficiency. Helping the development of performance indicators. Advising on the design and installation of improved information systems.

We can also help with policy analyses relating to mergers and joint ventures, including project appraisals to UGC/Treasury standards.

Whatever your problem we are sensitive to the special features of educational institutions.

Peat Marwick, one of the largest firms of chartered accountants and management consultants in the UK, is committed to helping the education service. Why not contact John Fielden on 01-236 8000 for more information on our range of services?

Come and talk to us, it could be educational.

You have a partner at Peat Marwick.

PEAT MARWICK

Image fails to appear

by Peter Aspden

Vice chancellors have still not agreed on a strategy for improving the public image of universities, nearly a year after the first meeting of the committee set up to look into the issue.

They were hoping to make progress in devising a campaign at their recent residential conference in Leicester - but doubts and divisions among vice chancellors as to the nature and cost of such a project are still rife.

The issue was given added urgency in Leicester by the remarks of the Secretary of State for Education, Sir Keith Joseph, who told them: "You can help me to help you by selling your virtues more effectively."

But the vice chancellors disagree as to whether to hire external public relations consultants to help boost their image - which would mean asking universities for extra money - or to beef up the strength of the Committee of Vice Chancellors and Principals to tackle the job.

They have also yet to settle on a clear and definite message to put across to the public. One vice chancellor even said it would not be in the interests of universities to publicize themselves more effectively at present, because all they would project was an image of "multidimensional drift".

He added that their work on public relations was proceeding "with glacial speed". The present committee responsible for that area, chaired by Professor Michael Thompson, has not met since the publication of a paper in July by Mr Jocelyn Stevens, rector of the Royal College of Art, which criticized the CVCP as "the dog that does not bark".

Strike date set for January

University lecturers' union leaders have fixed January 15 for the first of what may be a series of one-day strikes over salaries.

Plans for a ballot of the 30,000 members of the Association of University Teachers are to be put to an emergency council of the unions on November 8 with a result expected by mid-December.

Union members are planning to lobby next week's talks between the vice chancellors and Sir Keith Joseph, Secretary of State for Education and Science, at which the case will be put for urgent action to remedy the salary erosion both sides agree has taken place.

DON'S DIARY

Varig 757. The night-flight from London to Rio. The passengers assemble for departure. The Brazilians are unmistakable with their warm smiles and friendly eyes; their low, sibilant voices bring reassurance. Varig's cabin crew look composed and efficient. Samba rhythms and an aroma of strong black coffee confirm our final destination.

Nine hours later, the plane begins its descent at Galeão Airport with a clear view of mountains and coastline. The towering Christ of Corcovado extends welcoming arms; the morning light has turned the colour of pale coral.

Outside the customs hall, two Brazilian poets and a banker who prefers literature to finance are waiting to embrace me. Taxi drivers, hotel representatives, black-market dealers and porters provide an eager entourage. We drive off in haste.

Rio is a city that offers itself without any preliminaries. Heading for the city centre, we leave Governor's Island behind and pass through vast tracts of land where shanty towns are gradually being replaced with prefabricated houses. The functional usurps the picturesque in depressed areas with poetic names such as Bonsucesso and São Cristóvão.

Our route permits a glimpse of the Osvaldo Cruz Institute, with its outlandish Moorish architecture, the Niterói Bridge and the new Rodoviário, where intrepid travellers board coaches destined for every corner of this immense country. We soon reach the docks where British travellers once disembarked fortnightly from Royal Mail steamers. From Mauá Square we descend Rio Branco Avenue with its distinctive landmarks: mosaic pavements, the Candelária church where the famous marry, the municipal theatre and national library in neo-classical style, and the city art gallery modelled on the Louvre.

To our right, Rio pulsates with life. Stalls laden with oranges and water melons and the fluttering hands of blind lottery-ticket vendors add a festive air to this ugly conglomeration of snick-bars, cinemas and night-clubs. Arrows point to the nearby Santos Dumont airport; the museum of modern art and the memorial. Here the tourist's Rio begins. Broad, tree-lined avenues curve away from the city centre into a spectacular prospect of sea and sky.

As I absorb the tropical exuberance of the Bay of Guanabara, the lyrical descriptions of Humboldt, Darwin and Saint-Hilaire come to mind. Alas, this is the 1980s. The traffic fumes and noise get steadily worse as we head for Copacabana past Flamengo Beach, Botafogo, Urca and the Sugar Loaf mountain.

My hosts live on the top floor of an apartment block adjacent to Copacabana's Palace Hotel. My tiny room is crammed with dust-laden books and pictures. In recompense, there is a terrace with a view. Boutiques at ground level support grimy offices which in turn support floor upon floor of luxury apartments. Behind, the mountain slopes rise steeply with hovels precariously on every available surface, their squalor concealed by dense vegetation: a tangle of palms and giant ferns. Here, at a glance, is the whole of Rio society.

My programme in Brazil combines business with pleasure. I sprint between the St John Fortress and Harpooners' Beach early each morning. The sands glisten in the morning sun. The remnants of voodoo rituals from the night before lie scattered on the beach. They look macabre by day: wind-blown carnations, candle-stumps, a chicken's claw, and denuded plastic dolls.

After breakfast I make the town

of publishers and writers. Their comments suggest that there is no lack of literary talent but a dearth of publishing opportunities. The present economic crisis has made the Brazilian artist superfluous. I spend my afternoons in the theatre museum or at the national library.

My evenings are spent dining with friends. The foreign visitor is not allowed to forgo certain indigestible delicacies: *Feijoadinha* (black beans stewed with offal and dried meat) or *Churrasco* (barbecued meats served on skewers at an inexorable pace). Tropical fruits and sweetmeats with irresistible names like *Baba de anjo* (Angel's spit) complete the menu. The national beverages *guarda* and *chopp* are preferred to wine.

The current wave of theft and violence has created an atmosphere of dread and suspicion. Watches and jewellery are no longer worn, and everyone carries Xeroxed copies of personal documents. No one registers any surprise when I extract money from my shoe to pay bills in shops and restaurants.

After an absence of five years, I am struck by certain changes. There is much less talk about Brazilian football, Miss Brazil and carnival. There is much greater concern with Brazil's image abroad. Street demonstrations abound. Anti-bomb, anti-abortion, anti-Reagan. Wide-eyed and open-mouthed, the masses find it safe to vent all this protesting, however remote the cause.

In the sleazy side-streets bordering Cinelandia, the crowds seem more menacing than ever. Pouting transvestites compete for passing trade with hookers who look and behave like awkward schoolgirls. Beggars and street-vendors are avoided or disguised. Everyone fears a mugger in disguise.

The city's new metro has made life easier for thousands of commuters. It is miraculously efficient in a city noted for its chaos. There is, however, a price to pay. Historic buildings have been restored but their immediate surroundings have been mutilated, destroying and sense of period or style. Fine old colonial buildings have been razed to accommodate McDonalds Hamburgers or plastic supermarkets.

Ipanema has become a plethora of saunas, poodle-parlours, health food restaurants and centres specialising in parapsychology. Space is at a premium. The white stucco villas have been devoured by property developers. Private gardens with bougainvillea and acacia trees have become parking lots. Rio's St Germain des Prés has lost its charm. The girl of bossa nova fame has lost her jaunty air.

It is difficult to work or play in Brazil nowadays without feeling guilty. The rich take refuge in their clubs; the artistic milieu distract themselves with exhibitions and book-fairs; the middle-classes can no longer grin and bear it; the poor are anaesthetized with television's soap operas.

Observing a family of refugees from the barren North-east fast asleep under some newspapers on a street-corner, I decide to change the theme of my lecture. On contemporary Brazilian literature to 'A Question of Survival'. The debate afterwards provokes an emotional response. Brazilian writers and intellectuals scarcely need me to remind them of the artist's role in this inhuman age.

My research done and my lectures given, I seek out the other face of Rio. The earthly paradise extolled by 18th-century travellers can still be found in the forestal beauty of Tijuca Park, in the tranquil cloisters of the monastery of St Bento, and in the forgotten alleyways of Lapa.

Friends organize a farewell dinner at the Hotel Miramar on the seashore. We watch the lights flicker over the Bay of Guanabara, a scene that has moved adventurers, monarchs and luminaries. Next morning, driving to the airport, I read the lettering on the rear of the lorry ahead: 'The rich also weep'. To what purpose? I ask myself. Brazil and Brazilians deserve something better than empty vengeance.

Giovanni Pontiero

The author is senior lecturer in Latin American literature at the University of Manchester.

V-Cs in free speech move

by Peter Aspden

Vice chancellors are to issue guidelines to all universities on the issue of freedom of speech on campus and how better to control student demonstrations.

But they have told the Secretary of State for Education, Sir Keith Joseph, that there are limitations to what they can do and have asked for a more cooperative attitude from some local authorities.

The latest move comes in the face of the Government's increasing concern about freedom of speech at universities. Sir Keith told the vice chancellors at their residential conference that the issue was "absolutely fundamental to the whole nature of what a university is about", although he did not make it a key theme in his speech to them.

The vice chancellors agreed at the conference to issue guidelines in an attempt to preempt any plans the Government might have to introduce legislation on the issue. In April, ministers began consultations on halting all public funding for student union political activities to end abuses on campus.

The detail of the new guidelines, which will establish a code of good practice, will be decided at the vice chancellors' next full meeting on November 1, but they have already made clear to Sir Keith that the solution of the problem does not fully lie in their hands.

They are particularly concerned about "rent-a-mob" demonstrations, in which political activists who are not connected with the university arrive on campus to stir up trouble.

They also claim that the attitude of some police authorities is not always helpful. "Some of them will not come to the campus to help with crowd control even after being asked," one vice chancellor said.

"Most universities simply do not have the facilities or the resources to control huge rowdy demonstrations, and we must have the help of local authorities. Sir Keith really does not appreciate the nature of the problem and takes a simplistic view."

An attempt earlier this year by student and trade union leaders to produce a charter on freedom of speech with vice chancellors, polytechnic directors, the University Grants Committee and the National Advisory Body failed when the various sides could not agree on fine points of detail.

Pickets bar way to college

by Olga Wojtas

Scottish Correspondent

Scottish further education lecturers this week staged a one-day strike in support of their unresolved pay claim.

The strike was called by the further education lecturers' national section of Scotland's largest teaching union, the Educational Institute of Scotland, but a number of their colleagues in the Scottish Further and Higher Education Association joined in by refusing to cross picket lines.

The SFHEA this week issued its own strike ballot, with the result due in a fortnight. Both unions are already working strictly to contract, and a meeting is due tomorrow of the Federation of Associations of College Lecturers in Scotland which includes the SFHEA and staff in education colleges and central institutions, to discuss coordinated action if no acceptable pay offer is made.

Last week, the management side of the Scottish joint negotiating committee attempted to impose a pay award of 5 per cent, but were warned by the Scottish Education Department that a unilateral award was illegal.

The management move was apparently an attempt to avoid paying the increased national insurance contributions which came into force last weekend, and the SED warning was too late to stop at least two central institutions, Borders Regional Council and the Ayr division of Strathclyde from paying the increase.

The award is to be considered a payment on account until a final settlement is reached, and the SFHEA has said it will accept the 5 per cent as an interim award, with negotiations to obtain a full settlement continuing as soon as possible. The staff side is seeking a restoration of pay levels established by the Houghton committee a decade ago.

● The Secretary of State for Scotland, Mr George Younger, has shelved plans for a single examining body for both school and further education. The SED issued a consultative paper a year ago proposing a merger of the Scottish Vocational Education Council, which validates non-advanced further education courses, and the Scottish Examination Board.

But the SED reports that opinion was sharply divided on both the principle of establishing a single body and on introducing a single certificate, and that the initiative was also widely considered to be premature since SCOTVEC itself has only just been set up.

The introduction of new school examinations is also being hampered by the teachers' curriculum boycott in support of an independent pay review.



Stepping westward: Dr John Venables, reader in physics at Sussex University, will shortly take his skills in electron microscopy across the Atlantic to take up a half-time appointment as professor of physics at Arizona State University. Dr Venables is seen with an ultra-high vacuum scanning electron microscope, one of two built at Sussex for studies in surface physics.

Natthe members urged to campaign at local level

by David Jobbins

College lecturers have been advised by their union to take the campaign for higher education to their MPs locally rather than joining in next month's lobby of Parliament by university teachers.

Leaders of the National Association of Teachers, in Further and Higher Education emphasized this week this did not imply any cracks in the newly constructed alliance of teaching and non-teaching unions on both sides of the binary line.

But the National Union of Students has told its activists that because of Natthe's attitude they may have to take the lead in the public sector action.

The week of action was seen as the first evidence that trade unions in different spheres were ready to work together for the expansion of higher education as a whole. It centres around a delegate lobby of MPs at Westminster supported by the Association of University Teachers and the NUS.

Brooke confirms British geology inquiry

Mr Peter Brooke, under secretary at the Department of Education and Science confirmed this week there will be an official inquiry into geological surveying in Britain.

Opening an exhibition to mark the 150th anniversary of the British Geological Survey at the BGS's new Nottingham headquarters, Mr Brooke said a joint study of surveying was now being

set up by the Advisory Board for the Research Councils and the Natural Environment Research Council.

The inquiry will be similar to the Kendrew committee's examination of the high energy particle physics, and will be asked to report on the total resources required for geological surveying over the next five to ten years. The move is partly a product of

ferce lobbying by the geological community, many of whom believe the BGS would be better off outside the NERC - which is under severe financial pressure.

Sir Malcolm Brown, the director of the BGS, is in the survey's new annual report that production backlogs in the routine surveying of the British landmass are now very serious.



RIM NIMBUS SUCCESS BREEDS SUCCESS

When Research Machines launched Nimbus earlier this year we expected that it would sell well in both the educational and professional worlds.

In the event, the response to Nimbus power, networking capability and graphics has exceeded our most optimistic expectations. After only a few months, Nimbus is the biggest selling 16-bit computer in many sectors of UK education.

Of course, in the computer business the key to success is the range of software offered. The more software a computer will run, the more people will buy it. A measure of our success is that Nimbus now supports leading UK software packages in virtually all specialist application areas (often at reduced

This is a machine that will be at home in the classroom, as an aid to private study, or in the laboratory. It has the flexibility of a personal computer, the power of a mainframe, and the graphics capabilities of a graphics workstation. It is the perfect machine for education.

The Nimbus 16-bit system will be at home in the classroom, as an aid to private study, or in the laboratory. It has the flexibility of a personal computer, the power of a mainframe, and the graphics capabilities of a graphics workstation. It is the perfect machine for education.

education prices), as well as the vast range of generic MS-DOS software.

So whatever your microcomputing needs - computer literacy, business studies, art & design, CAD, technical word processing, research... Nimbus is the natural choice.

For further information, contact Research Machines Ltd., Mill Street, Oxford OX2 0BW. Telephone: (0865) 249866

RESEARCH MACHINES
MICROCOMPUTER SYSTEMS

Rolls-Royce chief revs up research

by Jon Turney

If Britain is trying to run a Rolls-Royce research system on a pedal-powered economy, as a member of parliament recently alleged, maybe the chairman of Rolls-Royce has a larger part to play in public life.

Certainly, Sir Francis Tombs will shortly bear a heavy responsibility for helping the country construct a Rolls-Royce economy - he is now set to add chairmanship of the high-level policy group the Advisory Council on Applied Research and Development (ACARD) to the chairmanship of the Engineering Council he assumed last May.

He agrees both bodies are charged with related tasks: "They're both concerned with promotion of technology as a major contributor to the nation's wealth". In practice, ACARD has a wider remit than the Engineering Council, advising the cabinet on the whole range of applied research and development. But the Engineering Council has a more direct influence on higher education, through its management of standards and validation for professional engineering qualifications.

Both have acquired a chairman with a hard-nosed business reputation and robust political views. He speaks of the postwar welfare state creating "a rather laid back approach" in Britain, "a tendency to over-value the role of the state, to heavy taxation of industry, and a cultural attitude that says somebody else will fix everything".

An industrialist and electrical engineer, he cut his teeth at GEC just after the war, and admires the management style pioneered in the company later by Lord Weinstock. That brand of efficiency was not much in evidence in other companies Tombs ran later, like the Weir Group or Turner and Newall, or in the nationalized energy industry where he worked in between.

As chairman of the South of Scotland Electricity Board, and later the Electricity Council, he found it impossible to manage well because governments always imposed short-term goals on the long-term needs of the industry. He left, he now says, because he wasn't allowed to run it in an efficient way.

Wearing his new hats, he is a strong advocate of the need for colleges to sharpen their management style "after many years of being indifferent to the marketplace". Here, as elsewhere,



Personal File: Sir Francis Tombs

economic pressures are creating movement to the right direction, he says, "the rapid rise in unemployment is concentrating minds".

In consequence, the climate is changing. "There's more awareness of the need for wealth creation as a precursor to the other things it is nice to do, even among totally academic groups". But he feels advisory groups and councils only play a limited, if valuable role in this change of attitudes. "People tend to expect institutions to do the impossible".

So ACARD's role is to influence thinking rather than have every recommendation translated into instant action, even "to reveal the obvious in a way that commands respect". And he is not given to black-and-white prescriptions for reshaping research priorities.

This was exemplified recently on Sir John Kendrew's committee on particle physics, which Sir Francis sat on as an industrialist and member of the Science and Engineering Research Council (a body he has just left). Some took him as one of the committee's hawks, but he turns out to be a defender of the middle way proposed by the committee.

He quickly concluded that £53 million a year was too much to spend on high energy physics, but the other extreme of pulling out altogether Sir Francis describes as "an excessively utilitarian view of science".

Britain top of the league

by Peter Aspdon

The productivity of British universities - measured by degrees and diplomas awarded annually per head of staff - is higher than that of most other advanced countries, and has grown significantly faster than that of manufacturing industry, a study reveals.

The survey, by Professor Robin Marris, professor of economics at Birkbeck College, London, shows that university productivity expanded at the healthy rate of nearly 23.5 per cent between the late 1960s and the present Government's first round of cuts in 1981.

Only Canada and France have better rates of productivity - but Britain tops the table which shows the difference between university and manufacturing productivity. "Of course, this is partly because our manufacturing productivity is so low, but that is the whole point," says Professor Marris in the study, published in *Political Quarterly*. "Since the comparative quality of our courses is not in question, it still seems true, certainly comparatively and probably absolutely, that we firmly continue to have the best higher educational system in the world, and that the gain has probably been increasing rather than diminishing."

Professor Marris criticizes the Government's attitude to the universities, which he says has been decided on a policy of ideology or prejudice. He also condemns the Jarratt committee's emphasis on developing measures of output for universities, when they already exist.

"Examinations exist to monitor performance, and in so doing they must also measure the output. The two functions are essentially equivalent. If we do not believe that exams monitor output, we should not set them."

His study also shows that the Government's policy on raising fees for overseas students could be shown to be damaging to the national economy.

Professor Marris, who goes on in the study to show that the Government and society generally run away from seeking relevant information about service sectors, and consequently mismanage them, said the treatment of higher education was inconsistent and shallow.

The Paradox of Services, published by the Political Quarterly Publishing Co, 4 Bloomsbury Square, London.



Sir Keith shares a joke with WEA student Dave Lawrence while discussing course structure and content.

Sir Keith keeps promise with visit to WEA

by Maggie Richards

Sir Keith Joseph, Secretary of State for Education, ushered tutors and officials from a classroom in Oxford last week and spent some time in discussion with adult students, seizing the opportunity to listen to grassroots opinion.

Sir Keith was fulfilling a promise to inspect Workers' Educational Association provision for second chance learners. At a conference debate in April he gave an undertaking to visit Oxford after Mr Linden West, the region's WEA district secretary, outlined the financial crisis facing the association and asked Sir Keith to intervene.

The Oxford WEA region is one of the least seriously affected by cutbacks in Government, university and local authority spending - yet it expects to

make a loss of £6,000 this year. In other severely hit WEA district, losses are anticipated to be nearer £30,000 with bankruptcy predicted if the situation continues.

In his private talks with students at Oxford, Sir Keith quizzed them about what they had learned and whether they considered the courses to be worthy of support. He also examined work produced by the students and teaching materials used for second chance learning.

Afterwards Mr West said: "Sir Keith seemed to have the view that the WEA could solve its own problem by marketing itself more efficiently. We have pointed out that even if fees are substantially increased and more students are attracted this will only raise a small additional amount, and will in no way meet the scale of the financial crisis we are facing."

Technicians delay call to pull out the plugs

University technicians have postponed their strike ballot pending the outcome of this week's negotiations on their pay rise.

Their leaders agreed to talks with the university employers on Wednesday after a warning from the Association of Scientific, Technical and Managerial Staffs that a strike vote would follow a failure to improve the 4 per cent already on the table.

They had intended the strike, if supported by the union's technician members, to coincide with a day of protests and demonstrations called for next Tuesday. Despite the delay, the protests are planned to go ahead with the support of other campus unions. They include a motorcade in central London, possibly ending at the headquarters of the Committee of Vice Chancellors and Principals.

ASTMS leaders intend holding the ballot if this week's talks fail to produce movement from the employers. The negotiations were being carefully watched by clerical and secretarial staffs leaders, who resume negotiations next week.

They too are likely to receive an improved offer - and will expect the vice chancellors at least to match the 5.5 per cent award to local authority white collar staff, which includes a 26 per cent underpinning for the lower paid.

Already a number of universities outside the clerical and secretarial staffs consortium have begun to pay the local government award, including Salford and Bradford.

escape the tyranny of reason which dominates the machinery of government. Too often planning ceases to be a valuable discipline and all plan becomes the end and all of decision. The plan is the truth, whereas it should be primarily a tool to recognize change as it takes place.

I can testify from a weekly post bag which has more than doubled with complaints over the last 10 years that the public find bureaucracy concerned not with flexibility in the real world but with rules and plans which have a dubious relationship to utility. The Labour Party usually fails to recognize that it suffers from planner's disease, whereby one blithely ignores anything which does not fit the preconceived plan.

Mrs Thatcher and the public are not after all far apart - if only she would treat them more as grown ups.

Keith Hampson

The author is Conservative MP for Leeds North-West

THE TIMES

Well qualified in a crisis

Despite much lobbying by the Committee of Directors of Polytechnics, there is only one polytechnic director on the public sector efficiency study group - a far cry from the do-it-yourself operation of the Jarratt committee, drawn almost entirely from the university establishment.

Mr John McKenzie, the poly director and government appointee on the efficiency study being run by the National Advisory Body, is not even a member of the CDP's south-of-Leicester charmed circle. He has been a poly director for less than two years.

However he does have at least one significant qualification. He probably has more experience in crisis management than any other current member of the CDF. He is the director of Liverpool Polytechnic.

University salaries were high on the agenda at the launch of the Labour Party's higher education campaign in Birmingham last week. But the timing of one lecturer's contribution could have been better: "Lord Gower said he found it hard to live in London on £33,000 a year - imagine how difficult it is on just about half that sum", he told an audience of incredulous students and fellow trade unionists, about to wrestle with their consciences over mass unemployment and a national minimum wage.

Lavatory humour fails to amuse

Bristol University students, suffering from a bout of collective belting after cuts in their block grant, were not amused to hear that the university was spending £100,000 on refurbishing the vice chancellor's residence.

The work was to be done before the arrival of Bristol's new vice chancellor, former Science and Engineering Research Council chairman Sir John Kingman, and - say the students - was approved at a university council meeting which went mysteriously unreported in the campus newsletter.

That did not prevent some very public comments on the lavish details of the refurbishment by student demonstrators at Sir John's arrival on campus. Naturally attention focused on bathroom fittings: in particular the rumoured several bidets which the university decreed be installed for Sir John and his future guests.

Sports commentator Archie Macpherson, welcoming new students to Edinburgh University in his role as rector, urged them to contact him over any problems - except football pools. Had he any expertise in that area, his talk would be coming via satellite from a yacht off Palm Beach, he explained, adding dolefully that after the rioting at Glasgow Rangers' Ibrox stadium a fortnight ago, the BBC were recommending him for the post of Beirut correspondent.

Problems with the overheads

Just one darned thing after another. The National Union of Students, already embarrassed by the exposure of South African links with the printers of its newspaper *National Student*, now have to explain to their members that the relaunched paper was four days late because a loose cable smashed through the printers' roof.

Leeds faces legal wrangle over editor's redundancy

by David Jobbins

Leeds University faces legal action over its decision to make redundant the editor of a learned publication which has earned international recognition.

In an example of what the Association of University Teachers regards as the abuse of fixed term contracts, Leeds has replaced Mr Richard Walsh, who for 11 years edited the *International Medieval Bibliography* while employed on a series of contracts.

Now the AUT is challenging the decision on two grounds - that Mr Walsh was unfairly dismissed and that the university failed to consult the union over a redundancy.

One problem for the union is that

Mr Walsh, in common with other fixed term contract employees, signed a waiver clause blocking access to a tribunal on grounds of unfair dismissal. But the AUT is likely to seek to challenge the validity of the waiver clause, arguing that under normal circumstances Mr Walsh's employment would have been permanent, although lacking tenure.

The *IMB* is a twice yearly bibliography of periodical literature in medieval studies, founded in 1967 by Professor P. H. Sawyer of Leeds University and the late Professor R. Hoyt of the University of Minnesota.

Attached to the school of history, it has been totally self-financing with subscription income covering the over-

heads to the university including the salaries of Mr Walsh and two clerical assistants.

Mr Walsh was appointed in 1974, initially on a one-year contract, which has since been renewed six times, and although his job title within the university has been editorial assistant or senior editorial assistant, he has been described in the publication as its editor since 1974.

On Professor Sawyer's retirement in 1982 an honorary editor was appointed and a steering committee established which recommended that Mr Walsh's contract should be renewed for a further two years with the warning his job was likely to disappear in a reorganization after September this year.

Mr Walsh was, according to the AUT, excluded from discussions on the reorganization, and was shocked by the news in June 1984 that he would have to apply for his own job. Although shortlisted and interviewed earlier this year, he failed to get the job.

It was not until three weeks after the interviews that Mr Walsh was told he would not be required after September. He was offered the minimum statutory compensation of about £1,600 but the AUT believes he should be awarded more in recognition of his work on a publication which has cost the university nothing and earned it considerable international recognition.

Sociologists 'abusing role'

by Karen Gold

Some sociologists are using their privileged role as teachers to advance their personal anti-Nato and unilateralist views, according to Professor David Marsland, professor of sociology at Brunel University.

However, the majority of sociologists simply neglect to deal with issues of war and defence, so that sociological accounts of modern Britain presented to students are one-sided and inaccurate, he argues in a pamphlet published this week by the Institute for European Defence and Strategic Studies.

Sociologists as a professional body are guilty of a thorough-going dereliction of duty in that neglect, Professor Marsland argues. The neglect is due partly to too close a link between

sociologists' purpose as social scientists and their commitments as citizens and political animals. But it is also due to what he calls a naive Utopianism and refusal to attach significance to biological factors and forces in sociology.

"With very few exceptions, sociologists simply do not seem to allow that violence, aggression and war may have biological and psychological roots," he writes. This Utopianism is supported by "a constellation of assumptions and attitudes which precludes any serious concentration upon the real causes of war or upon the need for effective defence".

The attitudes include a rejection of liberal democracy, a naive faith in the state and in internationalism. "Sociological Utopianism of this kind is

bound to prevent any adequate analysis of war and defence, and to encourage the propagation of fallacies and distortions which can only help Britain's enemies," he writes.

Professor Marsland analysed 35 basic sociology texts, including those used in O level, A level and undergraduate teaching, arguing that they contained hardly any examination of war, defence or international relations. He recommends that where educational institutions are involved in "indoctrination rather than education" they should lose their public funding.

Neglect and Betrayal: War and Violence in modern sociology by David Marsland, available from the Institute for European Defence and Strategic Studies, 13-14 Golden Square, London W1R 3AG.



New v-c put on his mettle

The new vice chancellor of Liverpool University is to be Professor Graeme Davies, 48, a professor of metallurgy at Sheffield University. He will take up his duties on April 1, 1986, succeeding Professor John Norbury, who has been acting vice chancellor since Professor Robert Whelan died last year.

Professor Davies was born in New Zealand and obtained his first degree from Auckland University, where he began his academic career in 1959. He came to Britain to take up a fellowship at St Catherine's College, Cambridge, before moving to Sheffield in 1978.

Guidance should benefit students, not system

Educational guidance should stay firmly on the side of the learner, as benefit to the individual is the most vital role of a counselling service, the Council for Educational Technology urged this week.

It cautions against a provider-led service, where education is viewed as a social/political tool, rather than benefiting the individual in whatever way he or she identifies.

"We feel that educational guidance should stay on the side of the learner

and develop processes by which providers can be influenced, not vice versa," the CET says in its response to a consultative report published in May by the Unit for the Development of Adult Continuing Education.

The CET welcomes the report for raising many important issues but questions several approaches outlined. In particular it is concerned about a proposal that every local authority should establish a network to bring together relevant agencies, serviced by

a central guidance unit. While networks are essential, the CET asks whether coordination of such a large number of organizations would be practical.

Mr Donald Gratton, 59, chairman of the UDACE has been appointed chairman of CET. He succeeds Professor J. C. West, vice chancellor of Bradford University. From 1972 to 1984 Mr Gratton was controller of BBC Educational Broadcasting.

I found my holiday this year rather like visiting the dentist: not looked forward to and painful in the event. It was obviously a mistake to stay in England, Mrs Thatcher again having failed to improve the weather. So everyone sat around pouring over masses of glossy magazines - fatter and sleeker than ever. I found *Vogue* riveting.

On two sides, spread 100 pages apart, to make way for the beautiful advertisements, was "A Certain Style: Margaret Thatcher". It is admittedly extremely difficult to find a feature article in *Vogue* since the idea is that you get lost in the ads. But this piece comes next to "The Lover".

Frankly I preferred the "The Plum Snudge" eyes of "The Mettle-some Beauty" on the preceding page to David Bailey's photo of Mrs T. But what a gem there is in the actual article. "I am passionately interested in fashion," it starts. "It brings both pleasure and jobs," declares the prime minister characteristically. After more than a page on "furry" hair and "pearls," Mrs

PARTY LINE

Firmness, not feeling, is the vogue word

Thatcher is lured into a revealing glimpse of her outlook and philosophy. "I think, historically, the term 'Thatcherism' will be seen to be a compliment. People say 'inflexible'. What they mean is firm. People want to know where they are with you. If you are firm it means also that you are firm on certain principles - people know that I always fight for what I believe in."

There lies her strength and weakness. She palpably cares about what she is doing. But there is always an implied bossiness. She is so strongly motivated by compelling values that she cannot easily understand why she cannot carry others with her.

I once wrote in this column about the Government's lack of flair. But there is a second "I" in politics. A good leader needs "feeling". She

Falklands Mrs Thatcher has lost her feel. This is partly because of the crusading zeal of a romantic who believes her life's goal is to lead the country to glory and success once again. But it also stems from a virtuous but dangerous puritan streak, which stresses the hair shirt more than the fun of life. I am sure Ronald Reagan is so successful because his main effort is always directed to communicating a sense of excitement and zest. Despite her common ideology Mrs T has never sought to do that. Yet it is crucial to the workplace, the school or any organization.

David Owen and Shirley Williams convey something of such zest. But I have always thought it odd, apart from the obvious party advantage, that the Conservative Party should have a leader who is so much more capable of original thought because they cannot

sensation on the basis that it will offer greater continuity of policy. In a way that is the last thing the country wants. A strong case can be made that there has been too much continuity in attitudes over the last 30 years. Why should continuity imply success?

Inertia is at the heart of the British disease. It is what stymies Mrs Thatcher. In one sense, the nature of our government is an important contributory factor. Decisions take a long time to reach from whatever the party in power. Too often bright ideas are massaged into impotence. The time of too many talented people is spent ensnared in endless working parties, committees and reports. So many ministers, of all governments, become less and less capable of original thought because they cannot

ACID RAIN

A new film from the CEEB Film & Video Library Available on FREE LOAN in 16mm film & video formats

Is Acid Rain an insidious killer of trees and fish, and cause of many other environmental problems? This thought provoking film - shot in Scandinavia, West Germany and Britain - explores the scientific questions behind Acid Rain as it affects atmosphere, soils and surface waters.

The film examines the complexities and uncertainties surrounding the problems of Acid Rain. It demonstrates the need to investigate every possible route to an effective solution.

Please accept my booking to see ACID RAIN

Showdate: _____ Alternative: _____

Format: 16mm ☐ VHS ☐ Beta ☐ Umatic ☐

Name: _____

Address: _____

Please tick this box to receive your copy of the CEEB Film & Video Catalogue ☐

Central Electricity Generating Board Film & Video Library
Viscom Limited, Park Road Trading Estate, London SE21 8EL, Tel 01-761 3035.



Vice-Chancellor Professor Geoffrey Sims, centre, serves the first customer in Club 197, the University of Sheffield's new Victorian-style pub, financed from the university's conference business profits and by two local brewers.

Phase two cash for key skills

by Jon Turney

Science Correspondent
Edinburgh, Glasgow, Manchester and Sheffield Universities and the Polytechnic of Central London top the list in awards for new engineering and technology undergraduate places from the Department of Education and Science.

Salford University, the Open University and the Cranfield Institute of Technology also get cash to help start substantial new initiatives in information technology.

The awards, announced this week, are the second portion of the £43 million allocated by government earlier this year as a response to shortages of graduates with key skills for high-technology industry.

They follow the £14.7 million distributed between 20 universities for additions to technology courses which did not need capital investments. The £28.3 million in phase two is

divided between 17 universities and eight polytechnics, as well as Cranfield and the OU, and will provide for extra intakes of around 1,000 students.

Glasgow tops the list of undergraduate places, followed by Edinburgh (72), Manchester (65) and Sheffield (60). Cambridge University, one of five to appear in phase one and phase two, has also done well with 70 new places overall.

The Polytechnic of Central London is given money for 65 places, followed by Plymouth (59), Kingston (46) and Middlesex (48). The eight polytechnics between them get £5.7 million, for 368 undergraduate and postgraduate places. This is the fruit of furious lobbying by polytechnic directors after exclusion of the public sector from phase one.

All the bids submitted to the DES were vetted by a committee set up under the Confederation of British Industry-backed Information Technol-

ogy Skills Agency, chaired by Sir Robert Clayton of GEC. The government was looking for pledges of industrial support, and many institutions have guarantees of company cash if they get money from the DES first.

These include Salford University which will modify its ambitious plans for a new information technology (IT) institute with 1,000 students after getting £1.4 million from the department - enough for 55 new students a year for the next three years.

The other major new venture now has support from the Exchequer for 50 undergraduate students. Cranfield's vice-chancellor Sir Henry Chilver is still negotiating with other potential backers for his proposed IT institute.

The Open University also benefits substantially from the phase two awards, with £1.5 million to increase student numbers on existing IT courses, and to develop new courses in microelectronics and digital communications.

Engineering urged to grasp opportunities offered by YTS

Engineering is the manufacturing sector which has made the least progress towards building a vocational education and training system based on competence rather than age, qualifications, or length of service, it was claimed this week.

The accusation came from Manpower Services Commission director Mr Geoffrey Holland during an address to the Engineering Employers' Federation on the new two-year Youth Training Scheme.

The scheme, which comes into effect next April 1 was the most significant development in education and training since the 1944 Education Act, Mr Holland said.

It presented employers with six major opportunities which they would do well to seize, and offered the engineering sector in particular the chance to make its own quantum leap forward.

For the first time, all 16 and 17-year-olds leaving full-time education stood to gain a foundation in occupationally relevant training. Second, participants would have the opportunity to attain a recognized vocational qualification based on standards of competence.

Any credits achieved would be based on work place learning, and at the same time youngsters would be in a position to assess whether they liked the job and whether it suited them.

In addition, the two-year period was to be regarded as a learning period, without obligation on the part of the participant, and the models underpinning the programme would give rise to new recruitment patterns.

"There has been too much class

distinction in industry and commerce and their recruitment behaviour in the past," Mr Holland said. "Young people have been divided too early into sheep and goats."

Finally, the Exchequer contribution to the scheme amounted to £4,000 per youth over the two-year period - although not all participants would qualify for the full two years.

Mr Holland reminded the EEF that at least £80 million was available under the scheme to assist the industry towards a qualified young workforce, a financial advantage which its overseas competitors did not enjoy.

In Britain the electrical contracting, construction, road transport and printing industries were a few examples of industries which had taken forward strides to create the much-needed professional and competent workforce with technical and technological skills.

By international standards, every recent comparative study showed Britain had an under-educated, under-trained and under-qualified workforce and the two-year scheme would be a step towards turning this situation around.

It is anticipated that 43,500 premium places will be filled in 1986/7, with 51,000 approve first-year premium places, excluding Information Technology Centre places.

Additional funding will also be available to disabled trainees in training schemes which offer high-quality specialized places. Funds have been set aside for 4,000 first-year places, and up to 3,000 second-year places in 1986/7.

Architects of disaster

A demonstration by more than 200 staff, students and professional architects was mounted outside the headquarters of the Royal Institution of British Architects (RIBA) last week in protest over proposed cuts which could lead to the closure of architecture schools at two polytechnics and one university.

Representatives from the affected institutions: Queen's University, Belfast, Huddersfield and North East London Polytechnics, presented their case against the proposals to RIBA's educational and professional development committee. They maintain the proposals are arbitrary, and in the case

of Huddersfield and NELP, at odds with recent accreditations of quality from RIBA's own visiting board.

Mr Peter Melvin, chairman of the RIBA committee gave the representatives assurances of support for their case after the meeting.

The recommendation that the above institutions should close their architecture schools, was made after the acceptance by the National Advisory Body and the University Grants Committee of a working party report released last month which suggested a 30 per cent cut in intake to Part 2 architecture courses, and a 15 per cent cut in Part 1 course intake.

Suddenly that sinking feeling

by Peter Aspdon

Plans to build a new students' union building at Royal Holloway and Bedford New College have received a setback which will cost the college £400,000.

The blow came when builders found an area of soft and decomposed ground on one part of the site, which meant that the foundations would have to be completely redesigned.

The college was forced to decide whether to ditch the £800,000 project, which would require extra work on the site anyway, or to give the go-ahead to the redesigned version at

an extra cost of about £400,000. Members of the council have now decided to continue the building work on the same site, even though they have not yet made any provision for finding the additional cash.

If the building was to be used purely for academic purposes, the college might have been able to claim the extra money back from the University Grants Committee - but these rules do not apply to a students' union building.

A spokesman for the college said the setback was "just a case of very bad luck", which "did not imply negligence and could happen to anyone."

"There were a number of test borings taken, which just happened not to include this piece of soft ground. Normally institutions make allowances for this kind of thing, but we were working to such a tight budget, we could not afford to," he said.

One obvious source for part of the cost is £200,000 which has been earmarked for a new sports hall for the college, which legally came into being on August 1.

Grants fight aimed at vulnerable MPs

by David Jobbins

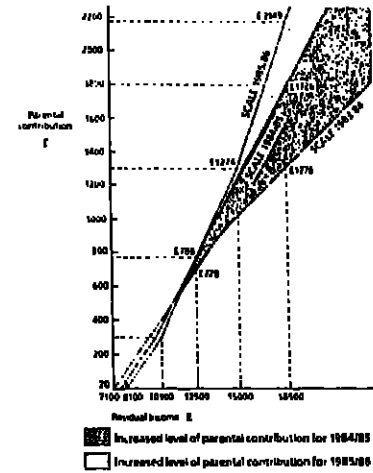
A sophisticated campaign to convince back-bench MPs that Britain's system of student awards needs radical change is being launched this week by the National Union of Students.

The NUS, which is already claiming a 17 per cent grant increase for 1986/87, has drawn up a five-point list of demands for improving the system and has written to all 650 MPs outlining its reasons as part of Target 326, the reasons of MPs needed for a Commons majority.

But it has specially targeted 59 constituencies where the student vote constitutes where the student vote is in a general election could be critical and is to pay particular attention to the response of the MPs concerned.

Bluntly, NUS president Mr Phil Woolas said: "Where the sitting MP is in a targeted student marginal we will put it to them straight - back our case for adequate student finance or we will vote you out."

The NUS first examined the 155 "official" marginals where majorities were less than 10 per cent of the electorate. But it decided that its



efforts would be better spent on seeking to influence constituencies with high student populations, and so it went on to produce its own list of 59 marginals.

Of these 33 are Conservative, 22 Labour, and four Alliance. Forty-two

seats (23 Conservative, 15 Labour and all the Alliance seats) are in constituencies where the numbers of higher education students exceed the majority by which the seat is held, while the rest are where the majority is less than higher and further education full-time numbers combined.

Among the MPs on the higher education list are Foreign Office minister Mr Malcolm Rifkind and newly appointed minister of state for education and science, Mr Christopher Patten.

Mr Patten's majority of 5,340 in Bath is matched by the NUS's calculation of the student vote in the constituency of 5,457. Influential Labour MPs on the list include Clive Sole (Hammersmith), John Gilling (Newcastle under Lyne), Michael Cocks, the Opposition chief whip, and Mr Barry Sheerman (Huddersfield).

Leading Alliance figures include Mr Roy Jenkins, whose 1,164 majority at Hillhead is vastly outnumbered by the estimated 7,760 student electorate.

Now the union is to concentrate on encouraging students to register where

their votes can be most effective, and is encouraged by the sight of all the political parties taking the youth vote seriously in the run-up to the next general election, when some estimates suggest that four million young people will have the vote for the first time.

NUS leaders feel that in the absence of the promised review of student financial support Government back-benchers are going to be especially susceptible to political pressure from students and their families.

In particular they say that parents are being asked to pay 270 per cent more in contributions towards the student grant than five years ago, and that they now make up 43 per cent of Government spending on financial support.

Of 323,000 students on full-time courses but not receiving any financial aid, 65,000 are on non-designated higher education courses.

The first parliamentary challenge to the Government's grants package for 1985/86, produced after last winter's climb-down on tuition fees, comes in the House of Lords next Monday.

London lethargy must go, says v-c

by Peter Aspdon

London University must shake off its lethargy and concentrate its development of modern methods of communication, data transmission and the use of audio-visual aids and self-learning techniques, says the new vice-chancellor, Lord Flowers.

In a speech to Royal Veterinary College students, he said the new methods were the tools for forging a truly federal university "where everyone can teach everyone else".

It would, he said, "be different from the one we knew when we stood at the hub of a great empire, setting educational standards and aspirations for half the world, but an exciting one nevertheless."

Some universities at home and abroad were more advanced than London in adopting such methods, and the university needed a clear vision of what was needed and of what could reasonably be done.

"It is an interesting speculation why the growth points in London have been

the Westminster and Charing Cross medical schools and the Royal Veterinary College, not in the centres of high-tech wizardry where you might have expected to find them."

Lord Flowers praised the college's innovative research programmes and its willingness to link with other institutions, such as its recent collaboration with Munich University.

"At a time of ever-increasing financial pressure, imposed by a Government that believes it can have education on the cheap, it would be all too easy to take refuge in purely protective measures. But it is precisely at such a time that there have to be bold innovations, long-term gains at the expense of short-term losses."

The university has introduced a new external BSc (Economics) degree as the first move in an expansion programme expected to take place over the next few years.

The degree will have specialist courses in economics, management studies, accounting and banking.

More volunteers urged for basic work with prisoners

by Maggie Richards

Volunteers should be used more widely in literacy and basic education work in prisons and with ex-offenders, says a report published this week.

A consultative committee of the Adult Literacy and Basic Skills Unit, whose predecessor pioneered the widespread use of volunteers in adult literacy tuition, has been examining basic education provision in penal institutions.

The committee's report precedes a national conference on the issue to be held on December 17 aimed at local education authorities, probation services and prison education staff, which will examine ways of improving col-

laboration. At present few volunteer tutors are involved in basic education in prisons, but where they have been used they have proved to be a valuable asset when working under the guidance of prison education staff, says the report.

The report highlights the ignorance of some probation officers of the breadth of literacy and basic skills tuition. Some do not consider their clients in need of help unless they are completely illiterate or innumerate.

The first party to visit China in December will be led by Mr John Ferguson, senior chief inspector of schools in Scotland, and will include Mr Craig Brown, principal of Dundee College of Further Education, and Mr John MacPherson, deputy director of education in Strathclyde Region.

Green Paper criticized as 'too narrow'

The Association of Colleges for Further and Higher Education has accused the Green Paper, *Higher Education into the 1990s*, as being narrow both in its perception of the purposes of higher education and of the contribution which higher education can make to the health of the economy.

Given that the major objective of the Government is to reduce public expenditure, with resultant cuts in resources for higher education, the paper is "more about coping with available resources than about development", states the association in a detailed critique delivered to the Secretary of State for Education and Science last week.

In its chapter-by-chapter observations, the association tackles the Government on its failure to address several fundamental problems raised by a short-term and limited view which is chief among these the adequate supply

of qualified maths and science-trained students to higher education, and the need for increased investment to produce the necessary manpower for a thriving economy.

If the need for higher education is to be related to higher education then it may be inescapable that more money will have to be spent, but more carefully, asserts the association.

Secondly, higher education does not have to serve the needs of the economy alone, and the Green Paper offers no strategy for the development of higher education in providing the kind of understanding that might well serve society.

Its view of the economy also concentrates heavily on manufacturing, states the association. The body surmises that the dangers inherent in such a short-term and limited view might be overcome by a longer range forecast

and emphasizes the need for a national planning agency to do this.

The association puts in a strong word of support for the promotion of access to higher education for potential groups of students (including mature people) on bases other than A level success.

On the issue of academic excellence, and research, the association scathingly repudiates the paper's assertion that universities are the principal guardians of "pure academic excellence" and states that the sooner the binary responsibilities of higher education in provision of higher education in providing the kind of understanding that might well serve society.

If there is higher education and the national economy, then research of an applied character should be given the priority to develop - another argument for redressing the imbalance between universities and the public sector.

It is only by the rational use of mind that as a university, as a national or as a world community we shall bring sanity to a confused world," he said.



The poor relation fights back

Amid all the drama of the Labour Party conference, with its media concentration on Liverpool and the National Union of Mineworkers, the first steps towards launching the Labour Party's charter for higher education went almost unnoticed. Only *THE TIMES* drew attention to the element within the proposed charter of most significance for public sector higher education; the commitment to parity of funding with the university sector.

The Labour Party is now the first political party to commit itself publicly to a course of action which will remove the indefensible difference in the unit of resource between the two sectors. The public sector which has been responsive to political demands to switch the balance of its provision towards engineering, information technology and other vocational areas and has also ensured the maintenance of student access at the time of the university cuts, has been penalized for its endeavours. The gap in funding is now too large to be tolerated.

The public sector has long been the poor relation in the world of higher education. Under-resourced from the outset, that disadvantage, which in the late 1970s was softening at the margins, is now increasing sharply. The entire system is living off its intellectual and financial heritage which is rapidly running out. The threat to quality of educational provision is no longer abstract but a daily reality in the lives of staff in higher education. They are increasingly outraged by the expectation that they will continue to deliver the quality of education students rightly demand in an environment which fails to support the maintenance of professional standards.

Quality is repeatedly used as a measure by which courses are judged and it is a nonsense to expect the public sector to compete as centres of excellence in any area of provision when the under-resourcing is so gross.

Increasingly, planning is being done on a transitory basis and comparisons made across the binary line. Quality is not measured against available resources but as though it were some abstract construct which, irrespective of resources, can be judged in isolation. It is scarcely surprising in such circumstances that public sector courses are criticized, when opportunities are created to rationalize provision it is the public sector rather than universities which suffer course closures.

The demand for parity of funding should not be seen as simply a sectional demand on behalf of the public sector. It is a demand for equity which ought to command the support of those in universities.

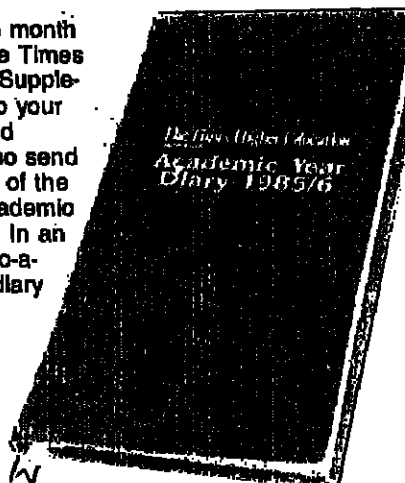
The universities cannot afford an under-resourced public sector which can always be used to threaten and cajole their sector to conform to government policy. The Association of University Teachers are fighting their own battle against selective distribution of funding for research within the universities' recurrent grant. Differential funding and differential status go hand in hand. The National Association of Teachers in Further and Higher Education's demand for parity of resources for the sector reflects the same principled stand. It is one which should unite, rather than divide, the sectors.

Jean Bocock

The author is assistant secretary, higher education, at the National Association of Teachers in Further and Higher Education.

HOW TO GET A YEAR FOR 6 MONTHS!

If you take out a 6 month subscription to The Times Higher Education Supplement, we will also send you a FREE copy of the popular THES Academic Year pocket diary. In an easy read, week-to-page format the diary also contains 14 pages of information on and addresses of universities, polytechnics, Scottish central institutions as well as research councils, trade unions and Government, local authority and employers' organisations. Simply complete the coupon below.



Offer applies to new subscribers in the UK only and closes on December 31 1985.

Please send me 6 months subscription to The Times Higher Education Supplement and my free copy of The THES Diary. I enclose my cheque for £18.50 (made payable to Times Newspapers Ltd.)

Please send to:

NAME _____ HED

ADDRESS _____

SIGNATURE _____ DATE _____

Please send this coupon with your cheque to FRANCES GODDARD, The Times Higher Education Supplement, Penny House, St Johns Lane, London EC1M 4BX.

overseas news

Boost for education research

from David Dickson

PARIS France is planning to give a major boost to research in education by putting the activity on the same administrative level as research in science, medicine and agriculture.

At present, these latter three have their own national organizations, which are responsible for distributing funds to research groups throughout the country, and maintaining links with the university research community. Education, in contrast, has had to make do with a single body, the National Institute for Pedagogical Research, which carries out virtually all its own research.

The minister for national education, M Jean-Pierre Chevènement, announced in Paris last week that he has asked a group of experts to prepare plans for a new body, to be known as the National Institute for Research in Education and Training (INREF).

Although the new organization has virtually the same title as that which it will replace, it is planned to be given much wider responsibilities, acting as a mechanism for bringing together research workers in universities, in other public institutions, and even in industrial companies.

M Chevènement's announcement was made during a two-day meeting in Paris which brought together almost 2,500 teachers, educational researchers, and industrial training officers under the ambitious title "Education training and society: research paths for the future".

One of the minister's main purposes in staging the conference was to counteract the impression he has given in the past of showing little interest in educational research, appearing to believe that effective teaching is primarily a question of conveying a closely-defined curriculum as efficiently as possible.

Although the meeting appears to have done little for M Chevènement's personal image - many teachers remain strongly opposed to some of his recent educational reforms, such as the substantial reduction in time devoted to non-academic subjects - its organizers claimed afterwards that it had been a powerful stimulus to the field of educational research which is expected to be expressed over a period of several years.

The key to this process will be the greater political visibility given to the field by the creation of the new body. According to a preliminary outline which has been prepared by the ministry of national education, the fundamental research sponsored through this body will fall into three separate categories:

● Research being carried out in the framework of existing academic disciplines, such as sociology, economics,

psychology and history;

● Research devoted to the approach taken to the teaching of specific subjects, such as mathematics, physics and modern languages, in French schools and colleges; and

● Research in new educational techniques, such as new forms of teaching material and self-teaching programs. In addition, specific research projects will be carried out over periods of four to five years. The goal will be to address specific problems in education raised by the ministry, which it is hoped will result in the production of new teaching materials and procedures.

While the new institute will take over many of the current activities of the old one in these fields, it will also operate through a network of regional offices, each of which will be responsible for keeping in contact with local universities and other research groups. This network will also be used to guarantee dissemination of the results obtained from the various research projects.

The creation of the new institution was welcomed during the conference by the minister of research and technology, M Hubert Curien, who said that it was needed to encourage greater interdisciplinary and cross-fertilization of the relative roles of fundamental and applied research in education.

Lecturer is mortally offended by computer

from William Norris

WASHINGTON

George Blanksten is back from the dead. His 200 political science students at North Western University, Chicago, are glad to hear it. And Professor Blanksten himself is somewhat relieved. At the age of 68 life holds sufficient hazards without being killed by mistake.

The professor's troubles began last year when his doctor submitted to Medicare - America's health plan for the over-65s - a bill for a routine medical test. Payment was refused. This patient, said the social security office, is dead. According to our computer records, George Blanksten died on August 6, 1984.

Blanksten's doctor was not amused. It is one thing to bury your own mistakes, but quite another to have some computer try to do it for you. He resubmitted the bill with an explanation, having established that his patient was indeed alive, but the computer would have none of it. Blanksten is dead, it said again. And again.

"The first month or two, I didn't take them seriously," said the professor. "I thought it was just a stupid bureaucratic mistake."

But by February this year the joke was wearing thin. Having filled in unpleased forms to no effect, George Blanksten went to the social security office and presented himself in person to the manager, Ms Carlene Sensenbrenner. He felt substantial enough, but Ms Sensenbrenner must have been able to see through him because her computer refused to change its mind. He filled in more forms. The rejected bill kept coming back.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

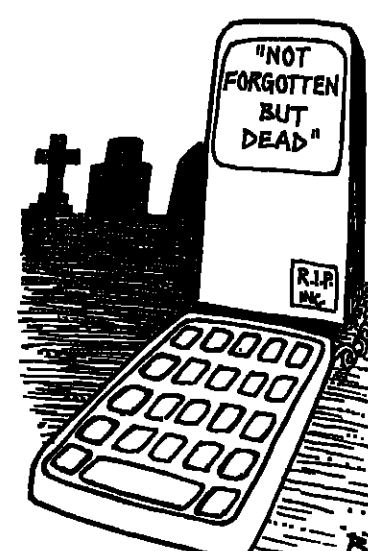
George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.



Blanksten's doctor was not amused. It is one thing to bury your own mistakes, but quite another to have some computer try to do it for you. He resubmitted the bill with an explanation, having established that his patient was indeed alive, but the computer would have none of it. Blanksten is dead, it said again. And again.

"The first month or two, I didn't take them seriously," said the professor. "I thought it was just a stupid bureaucratic mistake."

But by February this year the joke was wearing thin. Having filled in unpleased forms to no effect, George Blanksten went to the social security office and presented himself in person to the manager, Ms Carlene Sensenbrenner. He felt substantial enough, but Ms Sensenbrenner must have been able to see through him because her computer refused to change its mind. He filled in more forms. The rejected bill kept coming back.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Back he went to Ms Sensenbrenner, letter in hand, to take the wisdom of the computer a mere mortal academic is helpless. So far as she was concerned, he was dead. Sorry, professor.

It was the press which finally resurrected George Blanksten. In desperation he wrote to Mike Royko, a syndicated columnist with the *Chicago Tribune*, who revealed his plight to a disbelieving public. On September 17 an embarrassed Ms Sensenbrenner decided that her computer might, after all, have made a mistake. George Blanksten was returned to the ranks of the living after 13 months in the official tomb.

But while Twain got an instant apology from the Associated Press, Blanksten had no such luck. Two months later he received the following reply from Medicare: "As requested, we have reviewed your entire claim to decide whether our original determination was correct and we have found the decision made on this claim was correct."

George Blanksten is getting worried. The amount of his doctor's bill was trivial, but the long-term implications of being consigned to a premature grave were considerable. There was, after all, his pension to consider.

Physicians urged to heal numbers crisis

from William Norris

WASHINGTON

America may be about to suffer from a surplus of doctors. That, at least, is the theory of the Department of Health and Human Services, which is warning medical schools that they may have to cut their enrolments. The department believes that by the year 2000, the United States will have 51,800 more physicians than it needs.

This year, the country's 127 medical schools graduated 16,318 new physicians, which was 2,600 more than a decade ago but slightly fewer than in 1984 when graduations reached a peak of 16,943. The number of women graduates, almost 5,000, represented a 10-fold increase over 20 years.

Too many graduates chasing too few jobs

The days when government could provide ready-made jobs for graduates are over, according to Malaysia's Deputy Prime Minister Datuk Musa Hilmi.

Speaking in Kuala Lumpur, Datuk Musa said that the time when the Malaysian government could provide education and then jobs for graduates had ended - the government could not afford further expanding the public sector to accommodate the increasing numbers of graduates being turned out by the universities.

The deputy prime minister's comments reflect the central element of the government's thinking on the means by which "real jobs" can be created in the current recession. It hopes the private sector could play a more dynamic role and eventually take over as the major employer in the country.

Datuk Musa added that because of the current recession and Malaysia's foreign debt, the government, while reviewing its overall development strategy, had to be cautious in its spending and could not afford to be as generous as it has been in the past in meeting the demands of different groups.

Less public sector jobs provided by the government will, however, have little or no effect on the bleak prospects of most non-Malay (Chinese and Indian) graduates. This is because under the government's Bumiputera policy of preferential treatment for the Malays, most public sector posts (80-90 per cent in practice, according to recent reports) are reserved for Malay graduates only.

Hong Kong sets priority

Hong Kong's science and technology experts have been urged to take the initiative in developing new ideas by establishing the country's own scientific and technological research base, which would enable the country to adapt to worldwide economic changes and improve its competitiveness in international markets.

Speaking at a meeting of the Hong Kong Association for the Advancement of Science and Technology, Professor Y.Q. Chen, the association's president and professor at Hong Kong's Chinese university, told delegates that it was meaningful progress was to continue Hong Kong had to look less to Britain and Europe and more to inland China and the rest of Asia, as this is where most trading opportunities will be after Britain leaves over Hong Kong to China in 1997.

Foremost, he said, Hong Kong must establish its own scientific and technological research base and system of scientific standards and also set up a first-rate college of science and technology.

A further important priority, he added, would be developing programmes of scientific and technological exchange with research institutes and enterprises throughout China between now and 1997.

Szezia already has a number of

new and 1997.

overseas news

The new doctors will be carrying more than their diplomas and stethoscopes into their new careers. Some 14,000 of them will have an average debt to repay for their medical education of \$30,000. This is 13 per cent more than those who graduated last year, and may account for the argument of Jean Mayer, president of Tufts University, that America does not have a glut of doctors, merely too many in the wrong place. Mayer is refusing to cut the size of his medical school classes.

The problem is that few graduates with such a burden of debt feel inclined to practice in impoverished urban districts, community and migrant health centres, and isolated rural districts - places where the needs are great and the financial rewards are small.

Such areas are frequently served by those who were awarded scholarships to cover the cost of their training by the national health service corps. As a condition of the scholarship the student is required to spend a period of time after graduation, usually two years, working where doctors are scarce. Some go to the Indian health service or the federal bureau of prisons.

This year some 1,500 of the graduate crop have been enlisted in this way. This is a record number for the 13-year-old history of the programme, and it is likely to remain so. Cuts in federal spending under the Reagan administration have led to fewer scho-

larships being granted. The gap between a surplus of would-be rich doctors and a shortage of poor ones is therefore likely to increase.

Any young doctor or dentist who reneges on his agreement, and refuses to sign up to help the needy, faces stiff penalties. He may have to pay the government three times the amount of his scholarship, plus interest, and suffer exclusion from the Medicare and Medicaid programmes. At the last count, some 254 had been reported to the justice department, which is chasing them for a total of \$9 million.

Some cynics have suggested that this tough policy, put into operation earlier this year, has been responsible for the current record enlistment. This claim is earnestly denied in Washington.

They represented a broad spectrum of political, social and religious opinion drawn together by the desire to stem the disastrous effects the debt burden is having on living standards. Peruvian Juan Carlos Leon told the 600 delegates: "It's not worth finishing secondary school if you don't get a job. Some people end up selling things on the streets, with no rights, no home, no social security. Others turn to drug trafficking, robbery and prostitution."

Differences emerged over the view of earmarking 10 per cent of export earnings for interest payments, espoused by new Peruvian president Alan Garcia and conservative host Fidel Castro's line that the debt should be cancelled.

Many students from principal debtor states like Brazil and Argentina argued the need for individual rather than collective renegotiation or a refusal to pay.

"Brazil is in no position to say it won't pay the debt because of its own internal contradictions," said Andrea Neves, granddaughter of the late



Cuban leader Fidel Castro with delegates at the conference

Brazilian president-elect, Tancredio Neves. "First it must maintain the democratic transition from years of military rule."

But national sovereignty itself was affected by the debt, argued Mexican Ambrosio Llanos. The debt was used as a lever on countries to make them apply economic formulas which meant education, health and housing cut-backs, wage freezes and price rises, causing widespread popular discontent.

Many speakers called for the implementation of the United Nations-backed new international economic order. Latin American export income has dwindled because of an overvalued dollar, protectionism and high interest rates whereas the price of necessary imports has continued to rise. Computers operating in the national conference lobby where the meeting

was held brought out daily fact sheets to show among other things that earmarking only a portion of export income for debt repayment would ultimately increase the debt.

In Argentina, for example, a \$48,000 million debt would rise to \$79,000 million in 20 years even with 10 per cent annual export growth and only 6 per cent interest rates if it paid 10 per cent of export income.

The 15-day student meeting was one of a series of conferences Cuba has hosted over the summer attracting participants from many countries with which it has no formal diplomatic ties.

Journalists, trade unionists, women and leading political, social and religious figures from the region have met separately and their views been widely reported in Latin America and the Caribbean where the debt is one of the most burning issues of the moment.

New drug boost for Aids research

A possible cure for Aids - acquired immune deficiency syndrome - is now undergoing clinical trials at Duke University in North Carolina and at the United States' national cancer institute. The new drug is known chemically as azidothymidine and works by stopping the Aids virus from reproducing.

Laboratory tests have shown that "Compuzone" as the drug is code-named, can short-circuit the chemical process that the virus uses to make copies of itself inside human white blood cells. It appears to be less toxic than other experimental Aids medicines, but it is too early to tell whether its test-tube success will be repeated in the laboratory tests, is more enthusiastic.

He told a meeting of the American Society for Microbiology: "I think this is very promising. This is one of the most potent drugs against the Aids virus."

Dr Mitsuya's experiments show that in the test tube, at least, the drug protects infected cells from being killed by the Aids virus. Once the drug is withdrawn, however, the cells die.

Congress has voted \$190 million for Aids research in the coming year - almost double the 1985 figure and \$70 million more than President Reagan asked for.

In fact, as the reactor of the new university, Professor Kazimierz Jaslot, stated in his inaugural speech, the opening of the new university at this time is "a political act of great significance". The Act of Parliament which established the university stipulated that teaching must begin "not later than the beginning of the academic year 1986-87".

Now it will begin a whole year earlier. According to a press spokesman for the Ministry of Science and Higher Education, the main task in establishing the new university has been organizational and, in any case, it is not yet clear when the first classes will begin.

A major motive behind the foundation of Szczecin University has undoubtedly been the desire to stress the "Polishness" of the area, and to develop the region's economy.

Poland's "economic crisis" refers primarily to international finance; there are plenty of zloty, the spokesman said, for domestic construction.

This year, however, as Professor Jaslot explained, marks the 40th anniversary of the "return of the land of Western Pomerania" to Poland. The government of the Polish Peoples Republic is very sensitive about any signs of what it calls West German "revanchism", even when these are no more threatening than annual negotiations in West Germany of elderly pensioners who were born and grew up in the formerly German areas of Poland.

A major motive behind the foundation of Szczecin University has undoubtedly been the desire to stress the "Polishness" of the area, and to develop the region's economy.

Doctors' dilemma under review

by Sarah Jane Evans

Some 6,000 students are starting courses in medicine this term in Spain's 25 faculties. Between 50 and 75 per cent of them will not finish their studies. Few of those who do will have the chance to gain practical postgraduate experience: for the 20,000 who applied this year for internships, there were only 1,262 places.

The problem stems from Spain's policy of open access to university courses for students who have gained a basic qualification, allied to the popularity of medicine with its high status and income. The high-point for admissions was 1976-77, when 22,554 students enrolled in medicine, of whom only 8,181 graduated in 1981. The open access policy still holds in most faculties, but in 1983 because of the severe overcrowding a quota system was introduced in several faculties, among them medicine and veterinary science.

The university training consists of two parts, each of three years. Because of the overcrowding, practical experience for undergraduates is rare in many faculties. Successful graduates are free to open consulting rooms, or to do locum work in country practices, although they may never have seen the inside of an operating theatre.

Each year one in six graduates enters the exams run by the Educational Commission for Foreign Medical Graduates, which gives successful candidates hospital training in the USA. Only one in five of Spain's candidates pass, and the country often does worse than some in the Third World.

The remaining candidates enter the much criticized examination for internships in Spanish hospitals. This is a multiple choice paper, 250 questions lasting 4½ hours. Last spring the police were called in when it was found that a gang had been selling fake exam papers for 1½ million pesetas.

The candidate who does best goes to the hospital and speciality of his choice, and so on down the list of those who pass, but the further down the list candidates appear, the more likely they are to be assigned to a speciality in which they have no interest or vocation. Many who fail re-enter this examination three or four times.

The Ministry of Health and the universities have woken up to the seriousness of the problem, but can find no easy answers for a profession which has one of the highest levels of unemployment in the country. With entry to the Common Market close, Spain compares unfavourably with its neighbours and must bring its level of service into line with EEC standards, as well as making its medical education compatible with those of Europe.

Spain is third only to Italy and Germany in terms of the number of doctors per head of population (in 1982-83, there was one doctor for every 354 inhabitants, while the UK came bottom of the table with a ratio of one to 620), but it falls far short of basic levels of provision in the number of specialities.

Poland's "economic crisis" refers primarily to international finance; there are plenty of zloty, the spokesman said, for domestic construction.

This year, however, as Professor Jaslot explained, marks the 40th anniversary of the "return of the land of Western Pomerania" to Poland. The government of the Polish Peoples Republic is very sensitive about any signs of what it calls West German "revanchism", even when these are no more threatening than annual negotiations in West Germany of elderly pensioners who were born and grew up in the formerly German areas of Poland.

A major motive behind the foundation of Szczecin University has undoubtedly been the desire to stress the "Polishness" of the area, and to develop the region's economy.

Poland's "economic crisis" refers primarily to international finance; there are plenty of zloty, the spokesman said, for domestic construction.

This year, however, as Professor Jaslot explained, marks the 40th anniversary of the "return of the land of Western Pomerania" to Poland. The government of the Polish Peoples Republic is very sensitive about any signs of what it calls West German "revanchism", even when these are no more threatening than annual negotiations in West Germany of elderly pensioners who were born and grew up in the formerly German areas of Poland.

A major motive behind the foundation of Szczecin University has undoubtedly been the desire to stress the "Polishness" of the area, and to develop the region's economy.

Poland's "economic crisis" refers primarily to international finance; there are plenty of zloty, the spokesman said, for domestic construction.

Swedish 'dream' turns sour

from Donald Fields

HELSINKI

Two out of every three Swedish university teachers would be prepared to move to another job, provided it matched their qualifications. This conclusion has been drawn by Mr Göran Jense, a sociology lecturer at Lund University, after three years of study into the environment in which academics work.

Having interviewed 205 staff and postgraduate students from five faculties at Lund, Mr Jense revealed that dissatisfaction stemmed from feelings of job insecurity, fragmented workloads, too little time for research and inadequate resources for effective teaching.

The latest of Mr Jense's five volumes on the subject is called "Drömmen om professuren" ("The professorship dream"). It shows that the chance for recruits to university staffs ever to become professors is now very remote, with few promotional opportunities in the next 10 years.

Though the freedom to work how and when one likes still exists in the Swedish academic world, Mr Jense claims that it is circumscribed by responsibilities that impel 90 per cent of staff to work at weekends. Professors and lecturers in particular are unable to find time for research.

Mr Jense is perturbed that those who sacrifice long years on obtaining doctorates are not compensated in salary terms. Indeed, their job opportunities are narrowing because many employers prefer to recruit less qualified youngsters rather than waiting for doctors in their mid-thirties.

The feeling of insecurity is most acute among lecturers, few of whom have permanent status, and temporary teaching staff. Many are paid for working on externally financed projects subject to sudden squeezes.

Chinese expansion means shortage of equipment and staff

by Geoffrey Parkins

As higher education expands in China, the number of graduates enrolling in its universities is rapidly increasing. But, with expansion, a number of new problems are arising, the most serious of which is a lack of adequate research facilities, trained technical personnel and a scarcity of research subjects in many universities.

A recent survey of a number of universities and colleges shows that the limitation of research themes and facilities are preventing many students from realizing their full potential. Too

often, say students, the work they engage in is of little value, often being a repetition of work carried out by others. And when institutes do possess excellent equipment and laboratory facilities, they frequently lack the trained technical staff to handle the technical problems presented. This, says the survey, constitutes a huge waste.

Another problem revealed by the survey was the waste of talent that occurs when graduates take up employment. The survey found that something like 70 per cent of graduates interviewed felt that they were in the

"wrong jobs" and that what professional knowledge and skill they had acquired was not being used to the benefit of their employers or themselves.

More than 300 graduates recently assigned to work in one ministry said that since becoming employed, they had been given no "proper" work to do, and were largely engaged in activities unrelated to the fields in which they were qualified. Fifty per cent said they had been allocated clerical work, copying documents, handling the post and making choices like cleaning.

Graduates in most of the work

places surveyed, which included those under the ministries of agriculture, culture and metallurgical industries, the Chinese Academy of Sciences, and the Academy of Social Sciences, complained that the attitudes of their seniors was far from sympathetic when they voiced their thoughts, often being labelled "arrogant and conceited".

Employers' attitudes on continuing education and research were, said a large percentage

Peter Aspdon reports on the threat to Reading University's course in remedial language studies

As an example of how higher education is currently finding it difficult, to say the least, to respond to new needs, the case of Reading University's diploma course in remedial language studies is hard to beat.

The course is the country's only specialist training provision for teachers of speech and language-impaired children; but following five successful years, it is in danger of closing because of the ubiquitous "financial difficulties".

No one involved in the running of the course, or in the teaching of speech-impaired children, has any doubts as to the usefulness of the diploma. Not the Association for All Speech Impaired Children (AFASIC), nor the Department of Education and Science, nor the university itself. Yet in a few weeks time, it may have to announce that the course will be discontinued from next year.

The course was established by AFASIC in 1979, who managed to back it with financial support from Marks and Spencer, who provided an initial three-year grant followed by extra funds for a further two years. The importance of the course, says the association, cannot be overestimated.

According to Professor David Crystal, its first organizer, up to one-in-seven of all children can experience some difficulty in speech or language, yet there is virtually no provision for the training of teachers to deal with such difficulties.

Support – but no backing

There are occasional one or two-day courses run by AFASIC and the Invalid Children Aid Association, which are necessarily brief, even superficial, and are always heavily over-subscribed. "There is a real feeling among teachers that this is something they want – and need – to learn more about," said Ms Joy Stokes, an AFASIC officer.

The high demand for places on such courses is no doubt due to the relatively recent understanding of speech and language difficulties. General failure to develop speech can be due to all kinds of reasons, from deafness and mental subnormality to very bad home and environmental conditions.

But a specific language disorder can also be caused by certain defects in the nervous system, which limit children's ability to understand or express themselves. The conditions are known as receptive and expressive aphasia and dysphasia, and need specialist knowledge on behalf of teachers.

"The skills required are substantially different from ordinary teaching skills, it is a wholly separate technique," said Ms Stokes. "Teachers are forced to deal with a very wide range and variety of difficulties, but find

themselves in charge and with little idea of how to go about it."

It was this gap in training provision that prompted the setting up of the Reading course, which, in giving a whole year to the diploma, became the only in-depth look at the subject. Perhaps the most important function of the course is to relate the teaching of remedial children to the work of speech therapists.

"It actually helps teachers understand what the speech therapists are trying to do, which is very important in this type of problem," said the course tutor, Ms Margaret Davison. "There is no other training course which does this, and ours has proved very successful."

But as soon as the AFASIC funding stopped, it was clear that the ugly question of finance was going to crop up. The chief problem is that, from the start, it was agreed that the course should be self-financing, which would need, according to rough calculations, a minimum of 12 students a year.

That has rarely been achieved, however, not because of any lack of demand or enthusiasm by teachers, but because of the attitude of some

local authorities who are loathe to release staff for a whole year secondment, even in such a vital area.

AFASIC has pointed out to the authorities that the course is "poolable", which means that the secondment authority can reclaim the fees from central government, as well as 70 per cent of the salary of a replacement teacher, but, it seems, to no avail.

The DES has already supported the recommendations of the Advisory Committee on the Supply and Education of Teachers that high priority should be attached to training for special educational needs, and in 1982 awarded a four-year grant towards the setting up of a dissemination service to assist diploma-holders from the course to act as a resource for their local authorities.

So, unanimous backing from all quarters – yet the threat of closure continues to hang over the course. Many would not doubt see it as symptomatic of the extreme financial pressures exerted on universities in recent years.

Professor Frank Palmer, head of Reading's linguistics department, said the closure of the course would consti-

tute a serious loss. "I think it is not immodest to say that the course helped to revolutionize the profession in a certain way," he said.

"If it had been started up, say, 10 years ago, I don't think there would have been any problem in establishing it as a normal university course, with normal funding." But the idea of any university, however strong its goodwill, taking on extra financial commitments in the current climate is virtually unthinkable.

"We were going wind up the course last year, but suddenly we found ten students who wanted to attend, and with the university's help we managed to keep it going," said Professor Palmer. "But we really have to make up our minds in the next couple of weeks if it is going to go ahead next year."

As usual, he knows the demand is there, but he requires a somewhat firmer commitment to guarantee the course's future. Ms Davison emphasizes that there is still hope, but continual negotiations between the university's hard-pressed finance committee and AFASIC.

"But it is all so frustrating," she said. "Everyone knows it is a good course, it is important, it is unique, and everyone connected with it wants to continue," she says. But, like many others, she is already half-resigned to the impregnability of the vicious circle which has already forced the hands of so many institutions and individuals in the education sector.

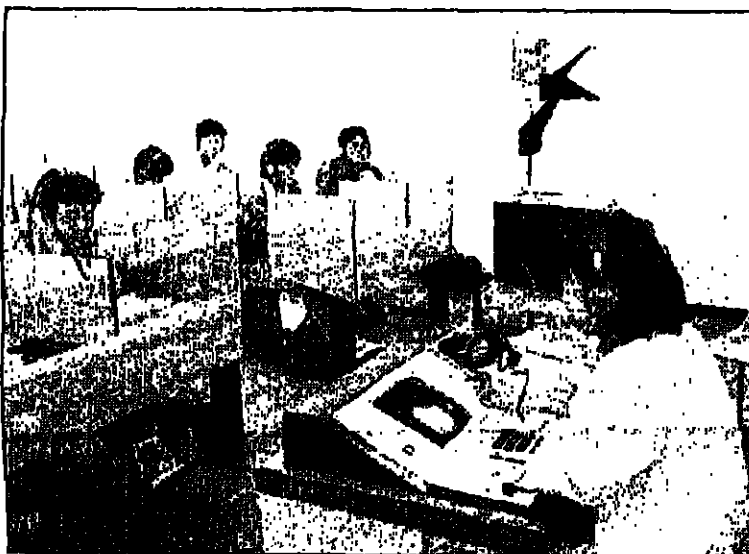
Speed is of the Hong Kong essence

There are many factors which contribute to the speed at which events take place in Hong Kong. Extraordinary population fluctuations, (principally upwards) over the last 30 years have made swift-acting administrative machine imperative, given a total of 5½ million people living in an area slightly larger than the Isle of Wight. At any rate the network of executive and legislative responsibility is comparatively compact.

The territory is ruled by the Governor as representative of the Queen and he is advised by the Executive Council, which is responsible for policy-making and the Legislative Council, which enacts legislation. Membership of the councils is either ex-officio or by nomination, subject to approval by the Governor or the Secretary of State. In anticipation of 1997 a measure of democracy is being introduced, though a nice balance must be struck if it is not to be the result of progress being too hasty or too slow. The administrative system and the geographical compactness of the territory conspire to give the visitor a sense of the presence of authority rarely felt in the UK.

The Governor and the two Councils rely heavily on external advice from many quarters and in the case of higher education the key body is the University and Polytechnic Grants Committee. As the title suggests, the binary line does not exist in Hong Kong and the UPGC functions both to review the needs of the universities and polytechnics and to advise the government accordingly. This wide-ranging remit, which does not include executive powers, has enabled the UPGC to advise on a coordinated policy for higher education and to highlight individual institutional needs.

Recent priorities have been to give extra support to the medical school of the Chinese University, the dental school of the University of Hong Kong, the consolidation of the 12-year old Hong Kong Polytechnic and the initiation of the new City Polytechnic. By 1982 it had become clear that Hong Kong's demand for graduates in many fields was falling far short of current and future needs. The Hong Kong economy was expanding very rapidly, more and more enterprises were being brought in for lack of a home-grown supply of appropriately qualified people and the UK policy on tuition fees for overseas students had halved the



Students using the polytechnic's language lab



Dr David Johns, principal



Peter Bourne looks at the rise and rise of the City Polytechnic of Hong Kong

number of Hong Kong students in UK universities and polytechnics in two years.

The decision was therefore taken in the summer of 1982 to set up a new institution to be run in close collaboration with the existing Hong Kong Polytechnic. Although the two polytechnics would be separate and autonomous, the largely common membership of their governing councils would ensure a minimum of wasteful duplication both of resources and educational programmes.

A chronological table makes interesting reading:

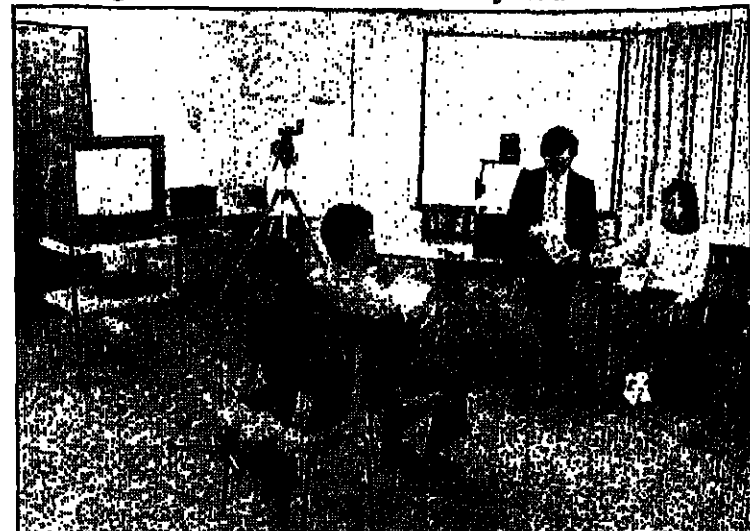
1982 Planning committee set up
December First report of the planning committee
Architectural competition set up for the new campus to be occupied in 1988.
Selection process for the director initiated
First selection interviews held in London.
1983 Dr David Johns, senior pro vice chancellor at Loughborough University of Technology appointed.

In the first year of operation, courses were offered in the departments of accounting, business and management, computer studies, languages, mathematics and science and social administration. To be joined in October 1985 by departments of building and surveying and electrical engineering. The learning resources centre comprises the polytechnic library, the computer centre, the educational technology centre and the audio-visual facilities associated with language teaching. The student welfare office

June Final architectural design selected.
July Three assistant directors and most of the heads of department selected.
October Detailed educational planning begins.
1984 Twenty-storey building in Kowloon purchased as initial temporary accommodation.
January Possession taken of this new building.
May Most of the building conversion completed.
October The first 1,200 students enrolled.



Recruiting for one of the student union's many social events



Social work students act out a role-playing exercise.

provides counselling and vocational guidance services.

All courses are modular in form, the modules making up a course which is prescribed, not chosen. "Mastery style" though electives are permitted in some courses. The mandatory and examinable programme, "Hong Kong Society", serves as preparation for some of the changes anticipated in the run-up to the handover in 1997. There is a heavy polytechnic commitment to part-time students, who work a fourth term in the summer and who take the same examinations as their full-time colleagues. It is polytechnic policy that at least half the teaching on part-time courses shall be by full-time staff, thus avoiding the "part-time ghetto".

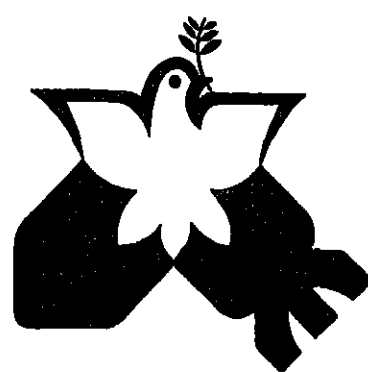
Validation is at present entirely internal, but there is dialogue with external bodies including the British Business and Technician Education Council. Though degree courses at the sister institution, Hong Kong Polytechnic, are validated by the Council for National Academic Awards, progress is well under way in the establishment

of an indigenous version, the Hong Kong Council for Academic Awards, which may eventually look at all degree-course validation in Hong Kong outside the universities. The structure of this new council has yet to be finalized, but there is a strong feeling that the subject board approach is not necessarily the most appropriate for modular courses.

Contact with the People's Republic of China consists principally of exchange visits and consultancy. Main items of interest are work experience placements for City Polytechnic students and the setting up of consultancies covering resource planning, management and the skills of various kinds which will be required following the setting up by the republic of the special economic zones to the north of Hong Kong.

There is considerable optimism for the long-term future of the City Polytechnic – in Dr Johns' words "what we are developing here will in 12 years' time be a very important institution of higher education in Greater China."

Peaceful transition



Adriana Caudrey on how and why Bradford University school of peace studies has switched from a practical to an academic emphasis

"When Peace here does house he comes with work to do, he does not come to coo." The doves at Bradford University school of peace studies have adopted these lines from the poet Gerard Manley Hopkins as their motto. By work they mean strenuous academic. In this way they can defeat their right-wing critics who assume that the study of peace must place partisanship before intellectual integrity.

This emphasis on academic rather than practical peace work has been achieved only after heated debate within the school. The most radical students of the late 1970s believed that the department should act out its ideologies, and this included challenging traditional academic goals. But when James O'Connell, professor of peace studies, took over in 1978 he prevented the school from becoming a subversive – some would say truly democratic – island within higher education.

He enforced his belief that "the true activism of university work is scholarship." In doing so he came into initial conflict with students who were calling for an end to classified degrees and for greater say in the recruitment of staff and the selection of undergraduates. They wanted the school of peace studies to be a microcosm of a just, and therefore peaceful, society and to reject many of the values and structures within higher education which they considered too establishment.

Those were turbulent times in which the school had to carry out its own "conflict resolution." At first there was uneasy truce between Professor O'Connell and the radical students, but this has now become a genuine state of peace. O'Connell knew that a real victory had been achieved when the current students' union "Alternative Prospectus" conceded that in the debate between the radical and the academic "the academics have generally won".

Peace studies has been brought into the academic mainstream. This is partly through O'Connell's belief that it is through respectability that the school will gain academic status and also that pioneering work in peace studies will reach a wider audience. Academics at the school have become increasingly prolific and the department is gaining a

reputation as one of the most productive within the university, as well as one of the most successful in attracting funds.

The science of survival is what O'Connell sees as its main area of study. The nuclear threat has given a particular "salience" to this subject, he points out, adding "if we do not solve this problem, there will be no other problems to solve." Much of the research carried out in the department is concerned with how to reduce the risk of a nuclear holocaust. One researcher has produced a costing of Trident which sets out to show what a mistake it is on economic grounds.

A colleague is writing a thesis on control and command of nuclear weapons in the event of a crisis, another is working on how companies can avoid too great a dependency on defence contracts by switching to greater manufacture of civilian products, and thus in the long run preserving more jobs, and another on how public opinion about the nuclear deterrent is formed, and then distorted in opinion polls.

The mushrooming of this kind of research has led the school to launch the second appeal for donations in its 13-year history. The Quaker Peace Studies Trust, which plays a big part in financing the school, is leading the appeal, for £250,000, which is specifically to fund disarmament and peace research. Already the Quakers have responded with £40,000. In its appeal literature, the trust writes: "Unfortunately, disarmament and peace research has been critically underfunded, and is still limited to very few centres around the world." Contrary to misleading information

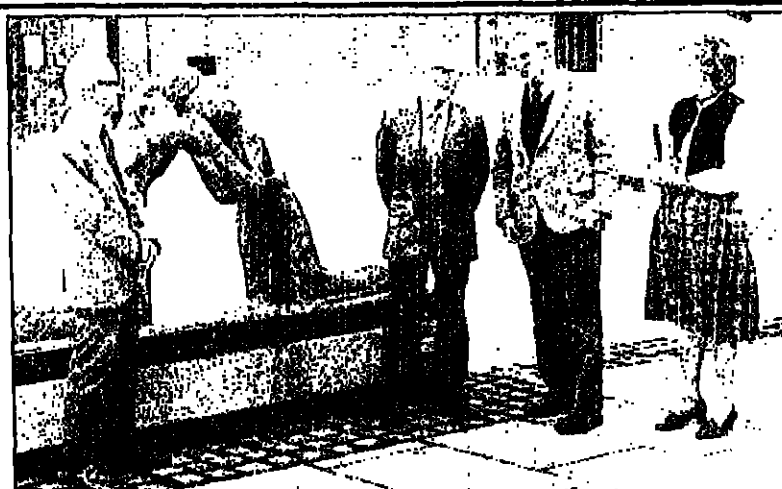
which is regularly disseminated by the school's opponents – notably Roger Scruton, professor of aesthetics at Birkbeck College, London – the peace studies department is mainly financed by the Government, just like any other university school. Scruton and his allies claim that it does not attract Government funds because it is too unconventional.

It has always received additional funding from the Quakers because it was largely on the initiative of the Society of Friends that the chair of peace studies was founded.

It is precisely because the school receives the bulk of its funding through the University Grants Committee that O'Connell believes it has a responsibility to put academic excellence first. If the groups working to secure peace can be divided into the Priests, the Prophets and the Kings, he sees the academics as the Priests, with a moral duty to society, but without the campaigning zeal of the Prophets – such groups as the Greenham women – whose calling it is to cry "woe", he says. Who are the Kings? They are for example the cabinet ministers – those who may seek to advance peace, but within the constraints of political compromise.

In his early days at the school, O'Connell shocked some of the undergraduates by saying he would welcome one of his students eventually becoming a cabinet minister, and thereby having an influence on defence policy. This was considered heretical. However, it characterizes his willingness to take on the real world. The school as it used to be was sometimes criticized for being too introverted.

It now also has more contact with the military than it used to, which has also been a controversial issue. It took some careful persuading to convince the Quakers, who tend to be pacifists, that this was a sound move. The



Peace school colleagues (left to right): Albert Greenwood, honorary visiting lecturer, Ken Ford, secretary of the Quaker Peace Studies Trust, James O'Connell, professor of peace studies, and Sylvia Brooks, appeal secretary.

school's dialogue and interaction with the military is partly a result of its willingness to examine conventional military alternatives to nuclear defence.

As with many of the issues covered in the department there is differing opinion as to whether there is such a thing as a just war. Those who see peace primarily as the absence of war argue that there is not. Whereas those who consider that justice is a precondition for peace say there is. It is held to be a healthy sign that the department does not have an orthodoxy.

Nevertheless, the core of peace studies has not changed since the school was founded. It is still defined as the willing co-operation among people for social and personal goals, and the absence of violence – physical, psychological, or moral. Peace is not studied in the abstract. It is studied in the context of justice and freedom and social change; of nuclear and non-nuclear defence; relations between developed and developing countries; industrial relations; and regions in conflict: those studied are Northern Ireland and the Middle East.

There is a tendency, even among some of the class of '85, to hark back to the golden age when the school was founded and idealism ran high. It still does, but is tempered with a more conventional approach. One researcher, Vickie Woodjones, was an undergraduate in the late 1970s and remembers when it was *de rigueur* to be arrested. "You felt bad if you weren't," she said.

Looking back to that time, O'Connell wrote recently: "It was not easy early on to separate academic work on peace from activism about peace in the minds of the students. The latter tended to be impatient with theory and anxious for action." His predecessor, Professor Adam Curle, wrote seven years ago, in an article published in *The Friend*, the Quaker newsletter: "It has not always been easy to find the proper compromise between conformity to university regulations on the one hand; and, on the other, building a school in accordance with the general principles of peaceful relations: openness, trust, and appropriately shared responsibility."

"Had we settled for a conventional, smoothly organized department in which all knew their places and played their parts according to the accepted moves, we might have taught more about international relations, or social science, or the UN or games theory, but not about peace, that elusive crucial landfall of our hopes, that is to be grasped as much by living and struggling and suffering, as from books and seminars."

Professor Curle admitted that the "living and struggling" which took place in the department in its early days did not necessarily make for a "peaceful" environment. It is perhaps significant that O'Connell quotes St Augustine for his abstract definition of peace as "the tranquillity of order." It is order, and its attendant peace, that he has brought to the department.

Maggie Richards reports on a higher education research project in Canadian prisons

Academic jailbreak

Twelve years ago a small-scale educational research project began in a Canadian jail, with the aim of introducing a handful of the country's most hardened criminals to a university environment. The project prospered, producing interesting but somewhat inconclusive results, and was gradually expanded to cover all four of British Columbia's penal institutions.

A detailed survey of the long-term effects of the project on former students who had subsequently been released produced some remarkable findings. And one emphatic statistic emerged: whereas Canada's recidivism rate averages 40 per cent of former inmates, among those who had undertaken the higher education programme a mere 14 per cent had been reintended.

Last week two members of the Canadian academic team responsible for the programme were in Britain to discuss the possibility of establishing a similar project in several prisons here.

Dr Stephen Duguid, programme director for the British Columbia project, and Mr Wayne Knights, co-ordinator at one of the Canadian prisons involved, hope to persuade the Home Office to launch a pilot project in Britain.

Higher education programmes are not new to the British penal system, but the Open University and external departments have been active in the field for many years. But the Canadian version differs both in its approach via a heavy concentration on a liberal arts curriculum, and in its attempt to recreate as faithfully as possible a university atmosphere behind the prison walls.

British Columbia has four penal institutions operating in a "cascade" system. Offenders responsible for the most serious crimes enter the maximum security establishment at the

top end of the scale and percolate down to an open prison prior to release. It is a pattern of provision which has greatly helped to preserve the continuity of education among a shifting prison population.

Between the two establishments at the top and bottom of the structure are a medium-security jail, deemed the most volatile because of the mixture of prisoners it accommodates both direct from the courts and from the higher security institution; and a separate prison dealing exclusively with sex offenders and informers.

From its humble beginnings as a piece of graduate research at the medium-security institution, the project now embraces all four prisons. Originally organized by the University of Victoria, a three-year contract for the entire programme was handed over to the Simon Fraser University in Vancouver by the Canadian government last year.

Access to the programme for inmates in each of the prisons is entirely optional and open to all comers regardless of ability – the programme has an in-built study skills course to help students adjust.

The university offers taster courses and sample lectures each semester, so inmates may familiarize themselves with the nature of the work they will be undertaking, and get some insight into the degree of commitment involved.

Some who have not continued their studies have used their newly acquired skills to obtain employment. Most have indicated an intention to further their studies at a future date.

The programme within each prison comes under careful scrutiny from the students themselves. Through a students' council, elected each semester, inmates are able to discuss the programme with the university authorities. Teaching staff are also vetted by this group; before a new tutor is appointed he or she will be invited to give a guest lecture at the prison and comments are invited from the students' council.

Through this intermediary, which has its own budget to supply books, films and equipment for the programme, the student inmates are also affiliated to the university's students' union. Within the union, a prison support group maintains links with inmates, arranges tours to the university campus for those in open detention and arranges guest speakers to visit each penal establishment.

It has been deliberate policy to ensure that the higher education programme within the prison is seen by inmates as entirely separate from the judicial administration. Buildings housing the programme in all four prisons are specifically set aside for educational purposes and supervised purely by academic staff.

Dr Duguid explained: "A large part of our programme has been an attempt to create an alternative community. There are no prison officers in the programme, and no officer is stationed at the entrance, but generally speaking the university staff are the

only non-inmates in the immediate area."

"In the 12 years the programme has been running we have encountered all the normal problems prisons suffer from, but we have not been affected by them. During a series of prison riots one institution almost burned down around us."

Many of the prisoners have remarked on feeling a sense of physical release from prison each time they enter the programme area, and Dr Duguid believes this has helped foster self-discipline among inmates.

"We have never had a serious incident in any of the areas, and a large factor in that has been self-policing by students," he said. "If prisoners see a situation developing they are inclined to intervene and head-off a confrontation, because they do not wish to lose that sense of relative freedom."

One possible source of conflict does arise in the relationship between prison staff and academics working on the programme. The university has been mindful of the tensions which might be engendered among prison staff resentful of such facilities being made available to inmates.

In an effort to defuse any possible antagonism prison officers are offered separate use of the facilities. The policy also gives them the opportunity to obtain an insight into the functioning of the programme. Courses for prison staff are also provided free of charge, whereas prisoners are expected to make a contribution from their personal allowances.

"In many cases the prison officer's image of education is of the primary school, with pupils sitting behind

desks for eight hours a day. We have repeatedly to make it clear that we do not operate on that basis," Dr Duguid said.

"There is a very real tension for the prison officers in their resentment on the one hand, but also the realization that their job is being made easier by the existence of the programme. They do have a lousy job to perform and in a very real sense we are making that easier for them."

A key role in the liaison process is played by the university co-ordinator for each institution. This is a full-time academic appointment, and the incumbent is responsible not only for relationships with staff and prisoners, but also organization of the curriculum and the routine operation of the programme. The university views this post as a lynch-pin in the operation of the entire programme.

The original research project on which the programme is based set out to establish whether moral development and changes in attitude could be accomplished by broadly based teaching of the humanities. The current programme is built around the belief that offenders are lacking in the cognitive skills necessary for the development of moral reasoning and problem solving abilities. The greater the degree to which these skills are acquired, it is argued, the lesser the likelihood of the offender returning to crime.

Dr Duguid has been involved with the programme for 10 years: "The problem we encountered all those years ago was that these men had been raised in the criminal system, which had given them a number of advantages and disadvantages – they possessed criminal skills, and a criminal record. The average age of first conviction for our students is 12. Each time they have returned to jail the level of criminal involvement has escalated."

BOOKENDS

If academics of science were adorned with portraits of Frances Crick, Jane Watson and Albert Einstein, DNA would still be a double helix and E would still equal MC squared. But the natural world might still look very different.

How different is a question Evelyn Fox Keller has been mulling over for ten years or so. Contemporary feminists have started to question the division to science, moving beyond asking why so few women become researchers to trying to understand how conceptions of gender, nature and knowledge interpenetrate. It is a path mapped out in Keller's *Reflections on Gender and Science*, published earlier this year but the fruit of work begun before the area started to become fashionable.

Professor Keller, who teaches mathematics and humanities at Northeastern University in the US, came well equipped to the inquiry. As she suggests in the book, a certain distance is needed for such an examination and; "as a woman and a scientist, the status of outsider came to me gratis".

She is an unusual scientist in other ways, too, moving into molecular biology after a PhD in theoretical physics at Harvard in the early 1960s. Her main research has been as a theoretical biologist in areas like embryology and development.

This multidisciplinary background as a working scientist was a useful way into history and philosophy of science. As a New York born and Harvard-trained intellectual in the 1970s she was bound to encounter the US women's movement and became involved with women's studies courses in the first half of the decade.

But as she recalled on a recent visit to Britain to speak at the British Association for the Advancement of Science, her first encounters with "the

woman question in science" did not immediately set her on the road to new research. "Being a woman had come to seem a very important fact about my being a scientist", she quickly concluded there was a pervasive belief in the intrinsic masculinity of scientific thought; "but I hadn't yet thought about it being my question".

That came a couple of years later, and she wrote her first paper on gender and science in 1978 - a psychoanalytic examination of gender and masculinity in science. She wanted to know where the belief in the maleness of science comes from, and what its consequences are, but the answers came together in fragments over a long period: "I wrote that article in 1978 because I didn't know how to write a book".

It felt lonely then because most feminists were hostile to her project, partly because she used psychoanalytic theory, partly because many then saw science as an ally, a means of dispelling "unscientific" ideas about women. She was by now determined to write a book, but "I didn't know how to talk about these things in ways that people could hear".

Then came what with hindsight was a crucial meeting - she arranged to meet the geneticist Barbara McClintock, with the idea of writing a short article. McClintock then seemed a neglected figure in a vital twentieth century science which had become dominated by molecular biology, to the detriment of her extremely refined traditional genetic analysis of maize.

But McClintock's work was just beginning to attract more attention. It dawned on the DNA-splitters that their hottest new discovery - that there were "jumping genes" which could move around the chromosome within a cell - had been anticipated by

What sex is science?

Jon Turney on how feminism affected scientist Evelyn Fox Keller



Evelyn Fox Keller: loneliness

a woman out of the mainstream over 20 years earlier. And she had done it by a remarkably painstaking application of traditional methods, mapping the genes' conferring different colour patterns on maize kernels.

Evelyn Keller knew from the first encounter "this was an extremely important story to tell". Yet it seemed at first a diversion from her main project for a book on gender and science. She mentally put this aside to produce a biography of McClintock, published in 1983 as *A Feeling for the Organism*.

As time went by, the role of this excursion changed, and her study of this outstanding woman scientist came to inform her other work on gender. It is now central to her thinking in a number of ways.

One is that McClintock is a useful example to cite as the Nobel prize

committee obligingly made her a laureate shortly after Keller's biography appeared. And if the range of the essays in *Gender and Science* - from Plato and Francis Bacon to developmental biology and quantum physics - have led some reviewers to charge superficiality, the same could not be said of the McClintock study.

She now sees the belated validation of McClintock's vision of a research programme focussing on differences in individual plants as a lesson in diversity. She does not necessarily want to encourage a reading of McClintock's career as a story about a feminist science, "by which people usually mean a feminine science". But she does argue strongly that gender is important in the story, if only because the geneticist's career was a repudiation of feminine stereotypes.

In her new book Keller returns to McClintock to relate how difficult it is for a woman to share the masculine pleasure in mastering a nature "cast in the image of woman as passive, inert and blind", as she sees it. This means that women scientists have an incentive to go beyond conventional divisions of the world, and especially beyond the common identification of nature as female and the (scientific) mind as male.

In her paper to the British Association, Keller explained that she now focuses on the role of language in sustaining these distinctions, in science and outside. Now the inquiry into gender and science has established a larger set of questions. It is still hard to see how to proceed. For Keller, it is easy to show that the language of science is steeped in masculine or patriarchal imagery, but far more difficult to think what effect a scientific language bereft of these images would have.

It is more difficult because modern science only arose once, so there are no variations to study. In effect this means someone arguing for a different approach to scientific inquiry has to start remaking science. This is a recipe for potential isolation from the scientific community which does not appeal to Keller at all: "I started a scientist and I remain a scientist".

Since completing the gender book, Keller has been looking at the use of language in evolutionary theory, an area long recognized as especially open to social influences.

In particular, she spent some time at the BA examining recent controversies over group selection theory, in which she found; "competition, conflict and individualism are almost invariably associated with maturity, hard realities - what life is really like". By contrast, cooperation, group selection and altruism were associated with a childish search for comfort, and with sentimentalism.

It is by pursuing analysis like this she hopes to answer inquiries like the professor who responded to the news she was working on gender and science by asking: "what is that you've learned about women in science?"

For Keller, the point is to learn about science, not about women, and to recognize that framing evolutionary theory in terms which sit so neatly with male culture is as romantic as insisting the living world is a picture of motherliness and security.

As she sees it, the division which has been set up between competition and cooperation is unrealistic - as she put it at the BA: "Nature is oblivious of all our romances and knows nothing of our gender roles and distinctions". Recognizing this, she argues, is an essential step toward making science a human, instead of a masculine project.

Fifty years ago, on October 3, 1935, the armies of fascist Italy crossed the frontier of the then Italian colony of Eritrea to invade Ethiopia, Africa's last independent state, at that time better known as Abyssinia.

The ensuing conflict, the greatest colonial war waged on the African continent, is remembered as one of the most poignant events of the period between the first and second world wars. A ruthless dictator launched a brutal, premeditated and entirely unprovoked attack against a largely defenceless people, many of whom had been Christian for a millennium and a half.

The invasion, carried out in violation of the 1928 Treaty of Friendship between the two countries, and which only the most perfunctory attention to established procedures for the arbitration of international disputes, was officially branded by the League of Nations as an act of aggression and a breach of the League Covenant. The members of the international organization, acting in accordance with their obligations, accordingly imposed sanctions against the aggressor, the first (and last) time such action was ever taken.

The invasion nevertheless continued more or less according to Mussolini's plan. World opinion was shocked by the indiscriminate bombardment by the fascist airforce of unarmed civilians, as well as by deliberate Italian attacks on foreign Red Cross hospitals and ambulances which as a result had to be withdrawn. Not long afterwards the invaders, determined on capturing the Ethiopian capital, Addis Ababa, before the rains, had resorted to poison gas in defiance of the international convention of 1926.

The failure of the League in face of this horrific invasion was highlighted by the contrast between the pathetically impotent demagogues of the Ethiopian Emperor, Haile Selassie, and the bombast of the fascist dictator.

For Italy, or more exactly for Italian fascism, the Ethiopian war was of major importance. Many Italians, fed by incessant official propaganda, responded to the Duce's demand that their country's defeat by the Ethiopian emperor Menelik at the battle of Adwa in 1896 should be avenged, and that Italy, like other European powers, should have colonies to exploit.

The seven months from the opening of hostilities in October 1935 to Mussolini's proclamation of the new Roman Empire on May 9, 1936, were a period of great excitement. The battles in far-off Africa, which were presented in fascist propaganda as of epic proportion, and the rout of the League of Nations, which was portrayed as an organization of "satisfied" powers bent on thwarting Italy's colonial ambitions, earned Mussolini a degree of popularity at home which he had never previously enjoyed - and was new to enjoy again.

Many Italians were persuaded that the occupation of Ethiopia would provide them with jobs, and perhaps estates on which to settle, and would thus help to solve the unemployment problem at home. It was also widely held that the empire, with its untold



Italian tanks move in, Abyssinia 1935. Below, Benito Mussolini

Revenge of the Roman Empire

Fifty years on, Richard Pankhurst looks at the events surrounding Mussolini's attack on Abyssinia

mineral and other riches, would contribute to overcoming the poverty of metropolitan Italy. The idea that Italy had a "civilizing mission" to perform among supposedly primitive and enslaved peoples also made a strong appeal, while the thought that she was being opposed by wealthier powers already possessed of colonies evoked xenophobic sentiments which the regime turned to its advantage.

The militaristic appeal of fascism, which thus owed much to the Ethiopian war, was, however, short-lived. As the cost of the invasion and subsequent occupation came to be appreciated, initial enthusiasm gave way to corresponding depths of depression.

Politically the war was important for Italy in that it caused the Duce to intensify the military character of his regime, and on him and his country, on a path of expansion. Having built up a war machine which had enabled him to lead the world over Ethiopia, he longed for further conquest - and was soon clamouring for Nice, Savoy, Corsica, Tunisia, Jibuti and Albania. Realizing that new conquests could be obtained only by association with his fellow dictator, Hitler, he was led by the unfolding of events to the Rome-

Berlin Axis of 1939, the "Pact of Steel" as he called it. The exigencies of imperial rule in East Africa had meanwhile caused Mussolini to abandon his country's racialist liberal traditions in favour of a policy of discrimination, conceived in terms of the "prestige of the (Italian) race". Nazi-style racial decrees were instituted in the empire and soon extended to operate against the hitherto unpersecuted Jews of metropolitan Italy.

The Duce's Ethiopian adventure was no less significant from the economic point of view. The immense cost of the war, and the commercial dislocation resulting from sanctions, led to the devaluation of the lira which the Duce had sworn to defend, as well as to a chronic balance of payments problem. These difficulties gave a fillip to policies of autarchy, or economic self-sufficiency, which were more and more tightly imposed in what was fast becoming a virtually permanent war economy. Large profits were earned by those who, often corruptly, succeeded in obtaining war and other contracts from the state, while other businessmen suffered from the extension of controls, and the public at large had to bear an increased burden of taxes, not to mention frequent short-



ages of imported consumer goods. Sanctions, and Mussolini's attempt at a counter-blockade of the "sanctionist states", disrupted traditional commercial contacts, and led to increased trade with Nazi Germany which was soon to become fascist Italy's comrade in arms.

Mussolini's victories of 1935/36, which represented the high tide of fascism, were, however, short-lived. They led, almost inexorably, to the dictator's entry into the European war in June 1940, and thence to the loss of the empire, Italy's military collapse, and in the course of time, to the abolition of the Italian monarchy.

For Ethiopia too the war was a major historical turning-point. The threatened invasion cast a shadow of uncertainty throughout 1935. Italian agents, as De Bono, the Italian high commissioner for Eritrea, later revealed, were actively engaged in "disintegrating activity" aimed at subverting the administration from within. The process of modernization, initiated by Menelik at the turn of the century, ground to a halt, as Ethiopia's modest budget was diverted to purchase arms.

Mobilization of the Ethiopian

peasantry, for a war on two fronts, north and south, had a serious effect on the country's agriculture, while the movement of large armies was accompanied by considerable looting. The subsequent fighting - and heavy Italian bombing - led to extensive casualties as well as to much destruction of property, notably in Makale and Dessie.

The Emperor's hasty departure for Europe, on May 2, 1936, constituted a major blow to the government. On hearing the news a group of Ethiopian patriots attempted to burn the capital in order to deny it to the invader, and there was widespread looting.

The ensuing Italian occupation passed through two distinct phases. The first, under the vice-regency of Graziani, a ruthless colonial general, was a time of intense repression. An attempt on the Viceroy's life by two Eritreans in Addis Ababa in February 1937 was followed by a three-day massacre in which fascist *squadristi* massacred thousands of defenceless Ethiopians. Orders were subsequently given for the execution of all soothsayers, as well as for the extermination of monks and deacons at the great monastery of Debra Libanos. This reign of terror contributed significantly to the emergence of an Ethiopian patriot movement which kept the idea of their country's independence alive, and grew substantially in the ensuing years.

The second phase began with the appointment as Viceroy of the King of Italy's cousin, the Duke of Aosta, who attempted to correct what he considered his predecessor's worst errors. He instituted trials for political opponents, and stopped summary executions. He made no attempt, however, to reduce racial discrimination which was on the contrary intensified, on direct orders from fascist theoreticians in Rome who imposed a policy akin to *apartheid*. The Duke's hope of obtaining substantial collaboration from the "natives" was thereby largely frustrated. Resistance increased, particularly as it became apparent that Mussolini was intent on confrontation with Britain and France.

From the economic point of view, the fascist empire failed to realize the dreams of its founders. Because of the country's mountainous terrain, and the need to crush Ethiopian patriot resistance, the main Italian emphasis was on strategic road-building. The coming of large numbers of Italians, who were settled mainly in the towns, also necessitated much other construction work, and led to the erection of many grandiose edifices, as well as to the rigid segregation of Europeans and "natives". The development of Addis Ababa was, however, for a time retarded by uncertainty as to whether it should be retained as the empire's capital.

"Fascification", road-building and other construction operations ate up so large a proportion of the budget that relatively little was done to develop the empire's productive capacity. Agriculture was largely neglected. The peasantry, accustomed to silver Maria Theresa dollars, proved unwilling to sell their produce for Italian paper money. Early hopes that the empire would be able to feed metropolitan Italy proved vain. Plans for the settlement of a million Italian colonists were abandoned for lack of funds - and security. Mining, which had aroused great initial interest, produced few tangible results.

The worst showing was, however, in the field of commerce which was disrupted by the imposition of fast devaluing Italian paper money, as well as by the expulsion, for xenophobic reasons, of long established European and Indian firms which were replaced by unwieldy state corporations.

Social services, which were racially segregated, were developed primarily for the European population. To prevent the emergence of a "native intelligentsia" education for Ethiopians was deliberately limited to elementary schooling.

Mussolini's entry into the European war - scarcely more than four years after the proclamation of the fascist empire - brought an end to Italian development in Ethiopia. The country which was liberated in the following year - and faced major problems of reconstruction, remained one of the poorest in Africa.

The author is director of the Royal Asiatic Society and a former professor in the University of Addis Ababa.

● This is the first in an occasional series about the major social and political crises of the last half century.

Saturday morning Ring circle

Felicity Jones sits in on a class of Wagner aficionados in her series on university continuing education departments

There is a special kind of passion reserved for Wagner's *The Ring of the Nibelung* above all other operatic works which takes people travelling half way across the world to see the latest production.

It seems to have the power to take over people's lives and certainly in sleepy Sussex, the power to persuade people to give up every Saturday for a whole year to study its music and meaning.

Not that it is unusual for the University of Sussex's centre for continuing education to hold Saturday courses. What is unusual however, for 30 or so students to sign themselves up for such a long and continuous course in one subject.

Although the Ring cycle generates such enthusiasm and undying commitment, it is still musically something of an enigma. What does it mean? What are the leitmotifs and how do they relate to each other?

The purpose of the course was to attempt to answer these questions. Richard Wagner himself appeared to change his mind on several occasions and introduced an element of ambiguity, by design or not.

Michael Hall, a lecturer in music within the department who is writing a book about the musical structure of the cycle, believes that Wagner cleverly left his meaning deliberately vague so that the work would be open to various interpretations.

"It is one of the Ring's enduring strengths that it is open to both revolutionary and fascist interpretations, while on another level it can be seen as a powerful homage to love. Most of the interpretations in recent years at Bayreuth and Covent Garden have been Marx-inspired, in which the gods are the capitalists and Siegfried, the hero, is the revolutionary. The problem is getting *Götterdämmerung*, the final opera in the cycle, to fit in with that interpretation," he said.

Michael Hall runs the Saturday sessions in the music practice room of the university's Garden Centre, a chilly garret which lends something of a romantic atmosphere to the marathon study course.

On the blackboard he sets out the acts of the opera in sections and motifs, using different coloured markers to highlight recurrent themes - such as pink for the birdsong leitmotif.

In the mornings a detailed analysis is given of each opera act by act, and to show how Wagner's story line and ideas were woven together. In the afternoon, scores in hand, students watch a performance of the same act followed by a discussion.

"I'm not a Wagnerian myself but you cannot help being gripped by the music. In the end it is the power of the music which does hold people," he added.

Many of his students are not so objective. For one ex-civil servant it is an acknowledged obsession. He just went to see the Ring in Rouen and rarely misses a production. He planned to attend the entire course again which is running in Haywards Heath this year.

Easy access to Glyndebourne and Covent Garden makes Sussex University a good venue for this course of



A scene from Welsh National Opera's production of *Die Walküre*, second part of *The Ring*.

study. A probation officer who works in London frequently joined the course and has seen the entire Ring four times.

Many followers of the cycle come to it late in life and with Brighton's largely retired population of older people it is a popular choice. It also becomes a social activity where friendships are forged through the winter months.

One group of women got to know each other on similar courses run at the Friends' Centre in Brighton and now enrol together on an agreed programme each autumn. They presented the tutor with an end of term cake decorated with a ring.

The influence of Schopenhauer upon Wagner and the eventual ending of the Ring caused much discussion in the class. The tutor pointed out that the composer read the 2,500 pages of Schopenhauer's philosophy

four times in one year and was never without the book by his bedside during that time.

The abnegation of the will as the way to escape the treadmill of life grabbed the composer's imagination, - and in turn prompted a discussion about the experiences of old age, causing one student who left Germany after the war to reflect upon life in England at that time.

Another keen opera-goer remarked that he had always enjoyed all opera but ever since he had entered Germany on D-Day he had not gone to Wagner. "I cannot understand that now since it is impossible to believe that Wagner was the cause of fascism," he said.

Like Tolkien's *Lord of the Rings*, the Ring becomes a complete world which takes on a life of its own. As this student commented at the end of the year-long course: "it could go

through the whole cycle again and look at it from the psychological perspective".

Sussex University's centre for continuing education is hopeful that the Wagner course will be able to continue in the foreseeable future.

Professor Manny Eppel said the entire work of the department was buoyant although it had lost 10 per cent of its responsible body grant due to recent Department of Education and Science funding changes.

Sussex has won two out of the 23 grants from the department for innovative projects in action research. One of the projects is in the use of television and video in the teaching of adults which make use of the existing studio facilities.

The second project will be to look into good practice in information technology.

Why the League of Nations sanctions failed

Mussolini, when planning the invasion of Ethiopia, was much concerned about a possible League of Nations blockade. On May 18, 1935, he ordered De Bono, his high commissioner in Eritrea, to amass munitions for "at least three years" as a precaution against the closure of the Suez Canal. In the event, however, the British Foreign Secretary, Sir Samuel Hoare, and the French Premier, Pierre Laval, agreed, on September 18, to rule out closing of the canal or "anything else that might lead to war". Sir Samuel's public stance was on the other hand more forceful. Addressing the League of Nations on the following day, he declared: "The League stands, and my country stands with it, for the collective maintenance of the Covenant in its entirety, and particularly for steady and collective resistance to all acts of unprovoked aggression".

The need for collective resistance to aggression came to the fore a month later, on October 11, when the League voted by 50 votes to one (Italy), with three abstentions (Albania, Austria and Hungary) that the Italian Government was guilty of violating the war "in disregard of its covenants". Four sanctions against

the aggressor were imposed, and became effective on November 18. ● An embargo on the export to Italy of arms and ammunition; ● An embargo on all loans and credits to Italy; ● An embargo on all imports from Italy; ● An embargo on the export to Italy of sundry metals including aluminium, iron ore and scrap iron.

The sanctions, which Lord Keynes described as "comparatively mild", were almost designed to fail. Prohibition I, on the supply of arms, was scarcely a restriction since Italy produced its own weapons, while Prohibitions II and III would have become effective only if the war was prolonged until the exhaustion of Italy's gold reserves. Prohibition IV proved, however, the greatest disappointment to the sanctionist cause, for it excluded several strategically important articles, notably petrol, steel pig iron, copper, cotton and coal, on the grounds that Italy could obtain them from countries not in the League, such as the United States.

The absurdity of the exclusion led Winston Churchill to comment: "The export of aluminium into Italy was strictly forbidden, but aluminium was almost the only metal that Italy produced in quantities beyond her own needs. The importation of scrap iron and iron ore into Italy was sternly vetoed in the name of public justice. But as the Italian metallurgical industry made but little use of them, and as steel and pig iron were not interfered with, Italy suffered no hindrance". Such sanctions, he contended, were "not real sanctions to paralyse the aggressor, but merely such half-hearted sanctions as the aggressor would tolerate".

Mussolini was, however, extremely nervous lest the League should extend sanctions to include petrol. He later confessed to Hitler that if this had happened he would have had "to withdraw from Abyssinia within a week".

The failure of the League likewise owed much to unwillingness to contemplate the closure of the Suez Canal, which, as President Roosevelt observed, would have "halved" Mussolini's aggression. This too was the opinion of Churchill who notes that the British fleet, then off Alexandria, "could by a gesture have turned back Italian transports", and comments: "If ever there was an opportunity for striking a decisive blow in a genuine

cause with a minimum of risk, it was here and now".

Sanctions scarcely outlived the Italian advance on Addis Ababa. On April 30, 1936, a British Foreign Office memorandum observed that Abyssinia as an "independent state" had been "destroyed". Arguing for the abandonment of sanctions, it observed that when a murder had been committed the corpse could "not be brought back to life by any attempt to lynch the murderer". At a subsequent banquet for Neville Chamberlain, the Chancellor of the Exchequer, on June 10, a speaker similarly urged that sanctions be terminated, and remarked: "When there is a corpse in your midst, it is better to bury it."

The retreat from sanctions rapidly gained ground. On July 4 the League voted with only one dissenting vote (Ethiopia) for their abandonment a week or so later. On that day Mussolini proudly declared "the white flag has been hoisted on the ramparts of the world's sanctionist states".

The League was irreparably weakened. It was symptomatic that the drift to the Second World War continued thereafter, almost without reference to Geneva.

Harold Silver

In praise of Lord Butler and the flower girl

Lord Butler is the message. Let me explain. In a small town in Pennsylvania we were looking at some dried flowers in a street market. Our accents started a conversation. The lady told us, with enthusiasm, that after 16 years she was going back to university ("school", she said, but I find it difficult to adjust to the American usage). In a "diner", having breakfast, we encountered a group of men discussing the relative merits of college courses at Penn State and Rochester, New York. The wives of some academics we met were complaining, and had just completed, or were about to start, higher degrees - returning to study after some years. We have become used not only to the thousands with 20 or 40 or more thousands, but - in places like Boston - tripping over them round every corner. Within a 30-minute car journey of a village in Ohio we counted nearly a dozen major colleges and universities.

The point, of course, is accessibility, but also expectation and massive encouragement to make use of access. It's no good just providing, or just wanting. The two have to come together in a climate of incentive.

At the edges of the system in Britain we have nibbled at the problem of access for groups under-represented in it. Access to higher education, for all the expansion of the universities and the elevation of the polytechnics and colleges of higher education in recent decades, has been constrained in part by traditional British concerns with the protection of "standards". Martin Trow in America underscores the distinction between the US concern with broad, open access and related difficulties of "problematic" standards, and the European concern with preserving high standards and limiting access.

What the British have tended to see in higher education is a plateau, extended to limited extent by Robbins, the plateglass universities, the polytechnics, the colleges. As the traditionally relevant age-group has declined in numbers, British politicians, statisticians, analysts, have made timid noises about possible new student constituencies. The Americans have not just found them, they have gone into battle to encourage them, to create them.

Hence the flower lady, the atmosphere of resumed learning, the pervasive sense of a system grappling with real issues - not just the immediate financial ones, real enough they are there and here.

I spent the evening with the newly-appointed president of a university which in recent years has faced protracted financial problems. He had no doubt that the continuously and increasingly new constituencies of students were one important solution to any such problems - of his or other people's universities, or of the nation. American higher education is enrolment-led, market-led, and too many deductions for Britain or Europe should not be drawn from its experience, but beneath this president's confidence that his university would pull through was an awareness of enormous, almost unending, and certainly exciting, human potential. I suspect his university will solve its problems.

It would be wrong to minimize the success of the British standards-dominated system, but it would be wrong to argue that we have made any serious steps towards reconciling that tradition with moves to open up access since the argument began to accelerate in the 1960s. The British record and discussion of age, participation, access



At the opening of this academic year, the students of psychology at British universities will have before them what purports to be a textbook providing scientifically authenticated data on *The Psychological Aspects of Nuclear War*, published and endorsed by the British Psychological Society. The content is unashamedly anti-American and unilateralist and the volume is currently receiving deservedly prominent display in the CND bookshop in London.

The "data" on which students are told they must "form their own judgement" includes assertions that Soviet decision-makers "have a more defensive orientation" than their US opposite numbers and that, in extending the areas under their own influence the Americans have shown they are more inclined than the Russians to use violence. From these propositions the only rational deduction is that Britain should leave NATO. In other words, the BPS has turned its back on what has been British foreign policy under both Labour and Conservative governments, ever since Stalin established control over Eastern Europe and the parliamentary democracies joined together to prevent him from seizing the rest.

Dr James Thompson, who was commissioned to write the book by the Council of the BPS, is a founder member of the pro-Soviet Psychological Society for Peace and his text, we are told, was submitted to seven anonymous "experts" before being adopted as a policy statement. Those present at the BPS annual conference in April 1983 agreed that a study on the subject should be published but the membership of the BPS was never consulted on the book's content.

The book, having been adopted by the council and published under the BPS insignia was sent out for review in its *Bulletin*, not to a fellow professional but to the Rt Hon Tony Benn MP. The arguments, he said, had been given "a great deal of extra weight by being adopted as a statement of BPS policy" and the book provided "all sorts of new points that can be used" by those, like himself, who were "campaigning against the arms race". British MPs, being notoriously over-burdened, have no time to read, let alone to think, and that is perhaps how members of all parties were induced to sponsor the book's launching party, which took place last March at the House of Commons. The sponsors included two Tories, Keith Best and Richard Body, Charles Kennedy of the SDP and a Liberal, Michael Meadowcroft. Although the book contains over 200 references to scholarly - and not so scholarly - publications, there is only a single entry published in the USSR: this evaluates the climatic consequences of nuclear blasts and has nothing to do with psychology.

In a letter to the *Bulletin*, Elizabeth Roberts, who is currently compiling and distributing internationally an *Index on Soviet Psychology* questions Thompson's proposals for applying "certain psychological findings obtained in laboratory settings" to international politics. She suggests instead a closer study of what is being said by the Soviet psychologists themselves.

Mrs Roberts offers two specimens: Professor E. V. Shorokhova, writing in the *Psychological Journal of the Academy of Sciences* 1985, Volume 6 No 2, expounds on the horrors of a nuclear holocaust suggesting that such dreadful weapons are a threat to peace only in the hands of aggressively disposed imperialists. Major-General Barabashchikov, writing in the *Problems of Psychology of the Academy of Educational Science*, Volume 2, 1985, insists on the need to instil a sense of "military patriotism" in all workers, especially the young.

Thompson deplores "the cognitive rigidity" of both superpowers, who divide the world into good and evil, one seems to have told him that, whereas the Bolshevik Revolution, Russians are indoctrinated with this manichean view of the global struggle from the kindergarten to the grave. Indeed this is even more true now than in the past. Former Chief of Staff Marshal Gorkov in his pamphlet *In Defence of the Fatherland* (Moscow 1976) emphasizes that modern weaponry requires ever greater readiness for combat and insists that the civilian as well as the military part of the population needs to be kept in a constant state of alert.

The first section of the BPS textbook elaborates the horrors of nuclear war in terms which will be familiar to most TV viewers and concludes that civil defence is not only useless but positively dangerous. It also claims, community usually read Arkady Shvetsenko's account of the 1948-49 famine in the Ukraine, that the famine was caused by the government's policy of collectivization.



The psychology of war and peace

(presumably on Greenham Common) in the struggle against the threat of nuclear war.

Among soldiers manning nuclear weapons, the author perceives a cognitive dissonance (meaning a contradiction) between "the inherent morality of being a good person" (like Dr Thompson) and "the untenable immorality of large-scale destruction". Thompson says that these soldiers feel (as indeed does most of the Western electorate) that "if we do all this, it will never come to that". He dismisses the point of view as "predicting unreality" and claims that all those who hold it are the victims of "a major cognitive technique" projecting evil intentions on the other side.

The second part deals with accidental war, laments human frailty and draws attention to the danger that the men with access to nuclear weapons might be addicted to drink or drugs. To avert this risk he suggests that all the men involved be vetted by psychologists though the reader seeks in vain for any practical information on the methods which psychologists would use to identify the undesirable. But if, as the BPS claims, it would represent the profession, it would seem that in seeking posts of military responsibility in the nuclear fields, only unilateralists should apply.

In the book's final and most important section, the BPS claims that psychologists are uniquely qualified to reduce the risks of nuclear war. If that were true, council members should be appointed to the top jobs in government, diplomacy and the armed forces. In practice, however, any one with experience of negotiating with the USSR or of attempting to set up academic or business contacts will recognize the remoteness from Soviet realities of Thompson's "techniques of problem-solving workshops and 'nuclear control centres' to be staffed by middle-ranking civilians and military men, who would work closely together as a team, to defuse tension and devise mutually beneficial solutions to bilateral problems."

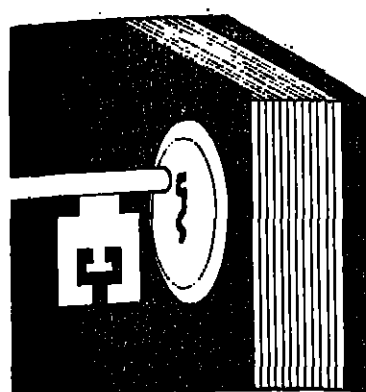
Members of the workshops, we are told "may have problems" when they go back to their own people, who would still be dominated by "old attitudes". For a Soviet negotiator who came home to defend proposals in any way at odds with the current party line, the only problem would be whether his incarceration would be in a prison or in a psychiatric ward.

Another specific recommendation is that, in the early stages of negotiation, those concerned should limit themselves to modest, feasible proposals not requiring too many concessions from the other side. Thompson might usually read Arkady Shvetsenko's account of the 1948-49 famine in the Ukraine, that the famine was caused by the government's policy of collectivization.

Nora Beloff

The author has written inside the Soviet Empire: Myth & Reality (London: Duckworth, 1984).

Swingometry of the Labour elite



Robert McKenzie's British Political Parties reappraised by Dennis Kavanagh

Television has made a handful of academic household names. One of the best known was Bob McKenzie, the political pundit and inventor of the election night swingometer. Few views, however, were also aware of the work in political sociology of Professor McKenzie, of the London School of Economics. Exactly 30 years ago his *British Political Parties* was first published to critical acclaim; a second revised edition was published in 1963, and plans for a third edition were aborted by his death in 1981.

There are few books on British politics which argue a thesis, and even fewer which argue an interesting thesis. It is safe to assume that most would agree to the inclusion of *British Political Parties* in such a list. The scope of the book was indicated by its subtitle, *The Distribution of Power Within the Conservative and Labour Parties*. McKenzie's thesis was that, contrary to the two parties' claims about themselves and their rivals, the distribution of power within them was very similar, notably in the domination of the parliamentary leadership over other sections of the parties.

In 1955 such a claim was greeted with astonishment. After all, everybody "knew" that the Conservative Party was elitist and leader-dominated, and that the mass membership controlled the Labour Party and its leaders were constantly under threat. Here was an outsider assailing the cherished beliefs of activists and staple ideas of political scientists. It is now fair to say that the combined impact of political events and research since 1955

has severely qualified McKenzie's original claims. Yet it remains a testament to the book's importance that scholars on British parties still have to confront McKenzie's work.

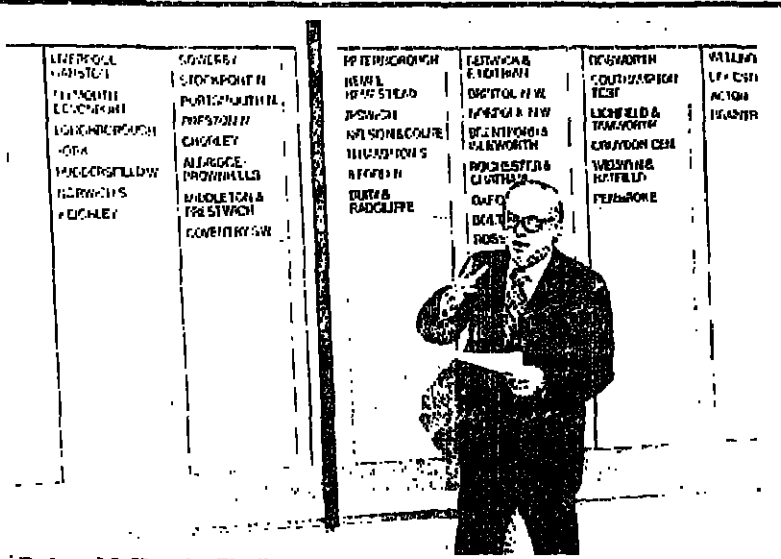
The spirited debate the book provoked was almost entirely confined to the Labour Party - in the large part because McKenzie challenged more of its fundamental myths. To claim that the realization of a party's cherished ideal of intra-party democracy was (a) incompatible with the British constitution and (b) more honoured in the breach than the observance, not surprisingly rankled with those who took it seriously, particularly on the left. Whereas the first claim was a value judgement, the second could be tested by study of the historical record.

Many on the left of the Labour Party agreed with his story of the parliamentary elites' manipulation of conference. But they were appalled by his argument that this was both inevitable and desirable. To support or oppose McKenzie had implications for the distribution of power in the party and the influence of different political factions, a case of a book feeding back into the political process. By contrast, his analysis of the Conservative Party has received perfunctory attention, partly because he did not radically challenge existing ideas about the party, and clearly regarded its theory and practice as being compatible with the British constitution.

In writing his study McKenzie drew upon Robert Michels' claims about the inevitability of oligarchy in all organizations, including parties. McKenzie shared what has come to be termed the elitist view of democracy. He agreed with J. A. Schumpeter that the classical idea of direct democracy was unrealistic because it granted too much initiative and intelligence to the mass and underplayed the role of leadership. He also agreed with Conservative objections to the theory and practice of intra-party democracy in the Labour Party on the grounds that it was "unconstitutional" for MPs to be accountable to an extra-parliamentary body.

In taking this position McKenzie was also writing within an important pluralist school of political sociology. This assumed that "mass politics" or direct political participation was often linked to political extremism, and that the relative autonomy of the elites and the mediated or indirect influence of party members on leaders would better safeguard liberal democratic values.

Like Bagehot, and most approving



Robert McKenzie: Similarity of Conservative and Labour

accounts of the British system, McKenzie disapproved of those "warm partisans" whose influence would produce the worst form of government - "sectarian government". Labour could escape from this only by "living a lie", retaining a constitution and myth, and breaking both when in office.

In practice, of course, Labour prime ministers have been as free as Conservative ones in deciding to form a government, selecting a Cabinet, dissolving Parliament, defying annual party conference resolutions, and insisting on collective Cabinet responsibility. Constitutionally, the parties, therefore, appear very similar when they are in government. But this view ignores the important differences when the parties are in opposition.

McKenzie noted how Labour's parliamentary leadership was generally secure, as long as it maintained the support of the leaders of the trade unions - "the key to an understanding of the Labour Party". But this is an extraordinary give-away, accepting the autonomy and independence of the Parliamentary Labour Party are largely conditional on support of an extra-parliamentary body, namely the trade unions which dominate conference. There were also political costs attached to this alliance: policy-making on incomes policy and industrial relations was left as the preserve of the trade unions; they were "not on the agenda" for Labour politicians. Here is a second, or hidden, face of political power which is neglected in McKenzie's study. In the late 1960s and again in 1978-79, Labour governments transgressed the traditional separation of spheres as questions of incomes policy and industrial relations came to the forefront of the political agenda.

Another difficulty with McKenzie's mode of analysis is that he posits the existence of two actors, the parliament

and extra-parliamentary bodies (particularly conference and NEC). But these are not unitary actors at all. Many struggles have been between alliances which were formed across these two groups. Coalitions for and against proposed reforms of industrial relations in 1969, occurred between the parliamentary leadership, trade unions, NEC and back-benchers.

McKenzie chose to regard the overlapping membership of MPs and ministers on the NEC as a device whereby the PLP could dominate the NEC. In fact in the early 1950s, and again from the late 1960s, most MPs elected to the constituency section of the NEC were left-wing and usually opposed the parliamentary leadership. The NEC also provided shelter for James Callaghan to lead the party opposition to his government's trade union proposals in 1969 and in 1974 for Tony Benn to defy Harold Wilson.

It is the history of the Labour Party since 1963 (the date of the second edition) which raises major problems for McKenzie's analysis, however. At first his thesis seemed to be confirmed, as the authority of conference was almost extinguished by 1970. Gaitskill had successfully defied it over defence in 1969 and the Wilson government had virtually ignored it between 1966 and 1970. But loss of office in 1970, an upsurge of radicalism among trade union and constituency party delegates, and intense disappointment with the record of the government, severely weakened the hand of the parliamentary leadership.

Between 1945 and 1969 the platform had rarely lost a vote at conference. But between 1970 and 1979 the platform lost 32 votes, many of them against the wishes of the parliamentary leadership. Conference and the NEC had traditionally been used to squash left-wing dissent in the PLP; in the 1970s the two bodies reinforced it. The

Labour conference and the new Labour government after 1974 increasingly spoke with two different voices on many issues. Once again the two wings of the Labour movement collided as the Labour government's incomes policy led to a confrontation with many public sector trade unions.

After 1979 the conference and NEC continued to move to the left on many issues and became more assertive. But there was a new development which sharpened the threat, implicit in the party's commitment to intra-party democracy, to the autonomy of MPs. The left wing mounted a campaign for greater party democracy to make the PLP more accountable to conference and MPs more accountable to local party activists. What was the point of winning office if Labour ministers were going to dilute the left-wing policies agreed when in opposition? Shifting the balance of power in the party became the left's preferred way of closing the gap between conference and PLP and preventing any alleged "betrayal" by the latter.

Reformers used the language of party democracy and constitutionalism to shift the party's policies to the left and to achieve a radical re-distribution of power between the different institutions of the party. The mandatory re-election of MPs within the lifetime of parliament and giving the trade unions and local parties a major say in the election of the party leader smashed the old rules of the game. But before his death McKenzie was still clinging, almost obsessively, in lectures, seminars and letters to the press, to his thesis about the similarity in the power structures of the parties; it was, he claimed, inevitable that party leaders would escape from the control of party members. But his own attempt to create a law of political behaviour failed.

McKenzie's book belongs to the elitist school of British political science. This view sees political power being concentrated in parliament, Cabinet and Whitehall, and buttressed by traditions of political practice and usage.

As part of the school of strong British government it fits easily with theories of the dominance of the Prime Minister, the deferential political culture and the political consensus. A reason for the acceptance of McKenzie's thesis was that it so obviously formed a part of the dominant view of the British politics. But it was also convenient for the analyses of those on the political left who argued that Labour's reliance on parliamentary methods, the leadership's willingness to trim and compromise, and the extra-parliamentary bodies' ultimate loyalty to the leaders, account for the failure of Labour to promote socialism.

The author is professor of politics in the University of Nottingham.

Architecture's Wright alternative

If the present approach to the education of the architect - an approach inherited from the philosophy of the modern movement - is to develop in step with future needs, then, EDWIN JOHNSTON argues, a review of the roles of both nature and technology may provide one important area for discussion.

"A noble building, indeed any work of art, is not the product of an act of design by some individual genius, it is the outcome of ages of experiment," wrote W. R. Lethaby in 1911. In his view, a true architecture was to be found in "the discovery of the nature of things, a continuous development along some line of direction imposed by needs, desires, and traditions."

When the modern movement in architecture first gained momentum, it was the products of industrial engineering that were to become a primary source of inspiration for the French architect, Le Corbusier. In his seminal, and influential book, *Towards a New Architecture*, first published in Paris in 1923, the imagination of architects was focused on the new aesthetic qualities of contemporary examples of industrial engineering. Le Corbusier's book began with the observation: "The Engineer's Aesthetic and Architecture are two things that march together and follow one from the other: the one being at its full height, the other in an unhappy state of retrogression."

The emphasis of the new philosophy of architecture was highlighted

ment, were to grow novel forms of puritanism, derived from technology.

But if the new possibilities opened up to architecture, by means of mass production, represented one important aspect of Le Corbusier's writings, then the innovative contribution of the American architect, Frank Lloyd Wright, was to evolve from a quite different origin, namely, the individual family house. A number of his private houses had been built in the suburbs of Chicago around 1900. Above all, Wright was a proponent of "organic architecture", and by the end of the 1930s he had delivered a cautionary comment for architects: "Science can only give us the tools in the box, these mechanical miracles that it has already given us. But of what use are miraculous tools until we have mastered the humane cultural use of them?"

The question raised by Wright, was of course, a reflection of a dilemma that had faced architects many times before, and one that in different circumstances, had preoccupied leading theorists in architecture such as William Morris and John Ruskin in the preceding century. It is the question about the important relationships between technology and nature in architecture.

Today, however, there are signs of a revitalization. For instance, there is a renewal of interest in the historic associations of architecture, and a new awareness about the use of resources. More attention is being given to the question of the scale of building, and also to social and psychological aspects, particularly in the field of housing.

At the level of the city, the need for conservation and rehabilitation are perhaps now being seen more as a continuous process, necessary opera-

the organic wholeness of architecture. Working in Finland, he had a profound respect for nature, that was to find expression in both his architecture and furniture. Writing in 1935: "We've already touched on the importance of variability. Nature, biology, offers profuse and luxurious forms; with the same constructions, same issues, and same cellular structures, it can produce millions and millions of combinations, each of which is an example of a high level of form." During a lecture to the Architects' Association of Vienna, he commented that it was "the task of the architect to give life a gentler structure."

In recent years, architecture has tended towards the production of stereotyped solutions to different kinds of problems. It is as if, for a period, the vocabulary of architecture had become muted or diminished in some way.

Today, however, there are signs of a revitalization. For instance, there is a renewal of interest in the historic associations of architecture, and a new awareness about the use of resources. More attention is being given to the question of the scale of building, and also to social and psychological aspects, particularly in the field of housing.

At the level of the city, the need for conservation and rehabilitation are perhaps now being seen more as a continuous process, necessary opera-

tions for a living organism, and indeed, complementary to the ongoing demand for new buildings.

If there is talk, nowadays, about what are considered to be the most appropriate styles of architecture, it may be partly because of the increasingly diverse nature of the architects' work. But if there should be one trend that is more notable than others, then it is surely an acceptance of a need for more humane forms of architecture to meet the needs of modern life.

The present climate of opinion would suggest that there may be a need for education to address the question of the relationship of nature to architecture. Apart from the knowledge a student of architecture needs to acquire about the different aspects of building, perhaps one of the most important skills to be developed is an ability to conceptualize and synthesize ideas.

In the landscape of modern life, changes occur in both the fields of social values and technology, but the inner reality of man changes to a lesser degree. When realized in architecture, harmony provides a source of nourishment. More consciousness of nature would perhaps take us forward on the path towards more humane forms of architecture.

The author is a practising architect and has taught regularly over the last few years at the Charles Rennie Mackintosh School of Architecture.

Poland: a troubled academic year

The academic year opens this week in Poland amid great concern for the future. No one in Warsaw is quite sure what the law on higher education accepted this summer by the Sejm will mean in practice. The quiet hope of every self-respecting academic (there are a few others unfortunately) is that the authorities will not over exert themselves in implementing the new legislation. But if they do the difference to academic life will be dramatic.

by George Blazysca

Elections to university senates and of university principals, already tightly supervised by the Ministry of Education, will become a complete farce when the ministry tells institutions who is and who is not an acceptable candidate. For lecturers the great problem will be tenure, and many will be afraid that permanent teaching jobs will be denied them for political reasons.

Of course there is much political control of university life already and people have been losing jobs for political reasons ever since December 13, 1981. Perhaps the ugliest aspect of the new higher education bill is that lecturers may be asked to take a loyalty oath and promise to teach in the spirit required by the Polish authorities. Among all the doubts that exist in Poland today there is a single certainty - academic freedom is an endangered species.

The introduction of the new law may seem puzzling given that the authorities were never slow or reluctant to act in the past against over critical academics. The bill is bitterly resented in Poland and it has also brought unwelcome attention to a regime deeply sensitive to international criticism. Yet the introduction of formal legislation to regulate academic life follows



Scenes of industrial unrest have been reduced, but universities have yet to return to normal.

the logic of the unfolding Polish drama.

Society is polarized. In this situation the authorities reach out for more regulations and formal powers to enable them to direct more and more aspects of daily life. The new education act makes it easier for the Ministry of Education to press forcibly down on every academic institution but it also advertises the enormity of the gap in Polish society between rulers and ruled.

The polarization of society makes it difficult to be optimistic about Poland's future. A young scientist I spoke to last week told me that he considers Poland to be an "occupied country". Society has been turning inward ever since General Jaruzelski declared war

upon it on that cold December night in 1981. This process is most clearly seen today at the church of St Stanislaw Kostka in Warsaw - Father Popieluszko's church.

At Koska apart from the flowers and candles surrounding Father Jerzy's grave - "murdered in 1984" says the inscription - the only public display of Solidarity banners can be seen. The banners, however, do not point out to the street - the state has forbidden it - instead they face the church building. It is another impressive symbol of opposition, a view of another Poland, one that is quite different from, and altogether more desirable than the official Poland of General Jaruzelski and the dry Party daily, *Trybuna Ludu*.

The Church is again a refuge, the protector of culture and tradition, a place where some integrity rules. But this, as the well known economist Tadeusz Kowalik reminded me, is not enough. Society needs more than the Church. People need channels that allow a genuine participation in political decision making. The Church cannot give a political lead and it meets great obstacles when it attempts to shape any kind of policy as is evident in the prolonged discussion over the Church fund to support private agriculture.

The state authorities are aware of the social need to criticize and much has been learned over recent years in terms of handling and channelling political discontent. For example, the

economic discussion in the press is reasonably lively today, though closely supervised by the censor. At the election campaign meetings currently under way criticism is encouraged and well-managed.

Take another example: Poland is the only country in the Eastern bloc where each week the government press spokesman answers questions (or makes a show of doing so) from Western journalists. Of course, in return these journalists have to sit through a tiresome catalogue of the iniquitous press coverage of Poland in the last week.

Politically the authorities have played a shrewd hand since 1981. It is hard to deny that Solidarity's "departure" was skillfully managed. In the economy, however, nothing much has been learned. The tough general could take power and by a mixture of repression and deft political manoeuvring "manage" his society. He cannot do the same for the economy. Or, at least, having halted the slump in output he has found it impossible to improve in any fundamental way the functioning of the economy.

Moreover, there are no solutions to this problem on the horizon. There are no external resources to support economic growth and the largest internal factor, the enthusiasm of the people, is out of Jaruzelski's grasp. There is no reason to believe that the result of the October 13 general election will in any way change this scenario. Notwithstanding the outcome on the thirteenth General Jaruzelski or his successor as prime minister will continue to govern without the support of the majority of Polish society. It is not a bright prospect for Poland, and in the universities and research institutes they are right to be wary of what the future holds.

The author is senior lecturer in economics at Thames Polytechnic.

Will Data Protection limit academic freedom?

by Peter Willetts

The civil rights lobby has been worried about the authoritarian implications of large organizations building data files on individuals and the improper use of such files through the networking of computers. At a more mundane level most of us have been pestered by insurance salespeople, credit agencies or double-glazing companies and would like to be able to control their intrusions. However, the Data Protection Act is a draconian piece of legislation, which is so extensive in its impact that it infringes the private individuals' right to use a computer in their own homes to improve the personal efficiency of their own work or social activities.

If you have any responsibility for processing records containing personal data about individual people, you are likely to be affected by the Act. The only exception is the storage of data on family, household, recreation or purely personal affairs. (Government gets sweeping exemption for "national security" and companies get exemption for payrolls and accounts.) Data about the members of clubs and address lists are also exempt, provided that the people concerned have been asked for permission. Otherwise the coverage is complete and affects

- all computers from large mainframes to IBM-type personal business computers down to the smallest micros such as the Sinclair ZX81
- all other electronic or even mechanical equipment which can automatically process information, including word processors
- computers at home as well as in the office
- data-sets of any size, even just two or three records

- data-sets in which individuals are identified only by numerical codes and not by name
- your responsibility for data that you use or analyse, even if you do not personally create it or have any personal access to the computer
- totally secure systems, even if you are the only person who can ever access the data
- objective numerical data, subjective data coded in a numerical form and subjective data stored as text in word form

- data-sets held for any length of time, with no lower limit being set
- data that is entered in a computer's memory, processed without recording on disc or tape and is erased when the machine is switched off
- data that is not currently in a computer system, if it is in a machine-readable form. The last three provisions are particularly preposterous. Without there being any specified time limit for which the data is held, the most

casual use of a computer should technically under the Act be registered. Clearly data held for a year should be regulated, but for an hour's use to be covered the law becomes a farce.

Such use is neither a purely hypothetical technicality nor of trivial significance, as a substantial amount of useful work can be done on a computer in the space of one hour. The point about the inclusion of all machine-readable data makes the Act obsolete at its inception, because it is held to cover printed material which can be processed by optical character recognition. At current technology allows ordinary print to be read, any piece of paper typed up with personal information is theoretically covered. (However, there must also be an intention to process the information - a legal nonsense as an intention may be no more than a thought.)

The exemption for the membership records of "unincorporated members clubs" is important as it will cover most student groups and professional associations. Halbury's Laws defines a club as a group associated together "for social reasons, the promotion of politics, sport, art, science or literature, or for any other lawful purpose", but not for trading, although incidental activity like selling publications is allowed.

Under Section 33, any data about members may be held, provided that the members have been asked and not refused to give their permission. They must also be asked if the data is to be passed on to anybody else. A separate exemption allows the holding of address lists without registration under the Act. The lists must only be used for the distribution of information and the same proviso about seeking consent applies. Thus unincorporated societies are most unlikely to need to register. Nevertheless, if they hold any data other than address lists or membership data, they must register that data.

Many academics already are finding that computers can be a useful method of improving their work efficiency. Now the Act has come to force the consequences are generally (a) registration of each data-set, including various details about the data - notably the purposes for which it is to be used and the sources from which it was obtained, and (b) the need to provide "subject access", that is the right of any individual covered by the data to see their own entry, with effect from November 1987. The impact upon ordinary academic tasks is as follows. Registration and subject access is required for

- processing examination results for examiners boards
- records of students' essay marks and calculation of their year averages
- lists of students' entry qualifications
- lists of students' course options, tutors, etc
- bibliographies
- departmental lists of staff publications
- personnel files covering decisions on staff promotions
- library files on borrowers

Registration without subject access for

- records of counselling and other mental health information about students
- records of physical health and illness of students provided that these are exempt under orders being prepared by the DHSS and due to be laid before parliament in the 1985-86 session.

Registration without subject access for

- statistical or research data provided that the data is not used or disclosed for any other purpose and that no individual could be identified from the results.

Neither registration nor subject access for:

- names, addresses and telephone numbers of student applicants or students who have been accepted or any other groups of contacts provided that the conditions explained above have been met.

The most important impact of the Act is the inclusion of exam results. The Committee of Vice-Chancellors and Principals lobbied hard and unsuccessfully to gain exemption. The only concession, mainly for the benefit of the GCE boards, is that time is given for the marking and processing of results.

This produces an unambiguous conflict between the law and traditional professional concern for confidentiality. If your institution has the policy that students should not be given complete details of each exam paper mark and the averages, then it will become illegal to use a computer to calculate the averages.

The importance of confidentiality is that it allows examiners boards to exercise some discretion, rather than having a computer award the qualifications. The obvious response is to take a preliminary look at the results and then change marks to legitimize the discretion being exercised with respect to candidates who experience illness, psychological problems, accidents, bereavement, etc. But this is no way out. "Subject access" gives the right to be informed of the computer data, in all versions in which the file has been held. A possible loophole immediately destroys the file, but it would be impossible to rely on this if the institution has no data choice but to "cease"

using any form of computer, micro or word processor to calculate exam results.

Section 1(8) of the Act says that processing of data "shall not be construed as applying to any operation performed for the purpose of preparing the text of documents". This is popularly known as the word-processor exemption. In correspondence with the Data Protection Registrar's Office I tried to see whether this did not provide a simple loophole to allow preparation of marks sheets for examiners boards.

The office would not countenance this and appeared to take a highly restrictive interpretation of the sub-section, to the effect that only if the computer file was identical to the printed document did the exemption apply. On this basis some standard operations under the Wordstar package are not covered by Section 1(8). The office appears to be adopted an illogical and invalid interpretation of the Act, but it might be expensive for any individual to risk fighting the issue through the courts.

Specimen registration forms have been distributed by the Data Protection Registrar's office and registration forms are now available in post offices. You are responsible for registering your data within six months from 11 November 1985. The real sting is that there will be a registration charge of £22 per data-user. This may be of no consequence to large commercial users, but is expensive to many small-scale users.

A guideline booklet explaining aspects of the Act is available free of charge from the Office of the Data Protection Registrar, Springfield House, Water Lane, Wilmslow, Cheshire SK9 5AX. However, at least in the case of the first edition, this is not easy to read, being in the same tortuous language as the Act. The full Act can be bought from the HMSO or is usually available in good libraries in Halbury's Statutes, Third Edition, Vol.54(1) 1984, pp.75-124.

The only certain advice is that, unless you can benefit from the club membership or address list exemptions, if you want to be efficient and remain within the law, you should abandon any plans to use computers for "personal data" for private purposes and ensure that you are registered for work purposes by your institution after 11 November 1985. The Act is comprehensive but cumbersome. It remains to be seen whether its workings will so marginalize the benefits of computer use for the average micro-using academic that it will in effect become a Luddite Act.

The author teaches at City University and is Treasurer of the Association of Learning Sciences in the Social Sciences.

by Philip Hobsbaum

D. H. Lawrence: Life into Art
by Keith Sagar
Viking, £14.95
ISBN 0 670 80164 X

Keith Sagar effectively began his career with a doctoral thesis published in 1966 as *The Art of D. H. Lawrence*. With one major digression - *The Art of Ted Hughes* (1975) - he has remained faithful to the author of *The Rainbow* ever since. His recent disquisitions have been bibliographical (*D. H. Lawrence: a calendar of his works*, 1979) and biographical (*The Life of D. H. Lawrence*, 1980). These are books to be consulted by any critic moving into this area, rather than one would look up Richard Ellmann if engaging with Joyce or Steven Gould Axelrod if one's quarry was Lowell. This present book combines criticism with biography in an attempt to relate Lawrence's sources to his finished works.

There is much here, original or not, that will be useful to students of Lawrence. It cannot help but be of interest to hear that the name of the heroine of "St. Mawr", Lou Witt, derives from Lu-Wit, an ancient Indian spirit who was transformed to a young woman. The fact that this point is made, as Dr Sagar acknowledges, in an essay by Keith Brown need not detract from the insight shown in calling it. The essay appeared in the *D. H. Lawrence Review*, a periodical of high quality but one hardly likely to be found in the hands of our students. Similarly, it is as well to know that the scene in *The Rainbow* concerned with Lincoln Cathedral - a late addition to the drafts, as Mark Kinkead-Weekes had previously informed us - was crystallized from a passage on medieval religion in Lawrence's "Study of Thomas Hardy". The short break taken between revisions of *The Rainbow* in December 1914 enabled Lawrence to read Henry Jenner's *Christian Symbolism* - not a work that leaps to everyone's mind - where he found the image of the phoenix linked up with the resurrection and this encouraged him in developing his own symbolic system. Dr Sagar points out, too, the passage in *Howards End* showing Margaret's wish to build a rainbow bridge between prose and passion, and says that is only part of the influence Forster exerted upon Lawrence.

All this is useful; yet we do not altogether receive from Dr Sagar the sense of a creative artist discovering the pabulum on which he is to work. More, Sagar does not really explore the techniques by which the artist selects from his raw material and improves upon it. This is a critic more at home with exegesis than analysis, proceeding upon assumptions that are never argued out. Possibly Lawrence can be discussed as one would Sophocles or Tolstoy, and he may very well be one of the two or three supreme writers of the last hundred years. Those who think differently, however, will not find themselves persuaded by this book.

Life into Art does not set out to persuade but to inform. It follows, therefore, that the book will most inform those like-minded with its author. Aficionados of Lawrence will be grateful to Dr Sagar for his account of Lawrence's movement towards free verse, an emotional as well as a technical matter, after he met Frieda Weekley, who was to become his wife. But those less committed to Lawrence than Dr Sagar may be aware that the account is given in terms of Lawrentian opinions expressed in the letters, the 1918 essay on Walt Whitman, and the 1918 essay on the new metric, "Poetry of the Present" (1919). They will miss the analysis that could have related Lawrence's verse, poem by poem, to Whitman and, indeed, Whitman to his own rhythmic progenitors. What is missing is the sense of a wider context. It would, for example, have done Dr Sagar no harm to refer to Charles Hartman's essay on prosody, *Free Verse*. That could at least have helped to define an entity whose parameters are still in doubt. As it is, there is little in this commentary that we could set beside Sydney Murgrove's discerning study of the equivalent links existing between Whitman and T. S. Eliot.

This lack goes along with a noticeable foreshortening in the discussion of Lawrence's poems at large. Ever since the pioneer thesis written on the subject by the late Gábor Salgado in 1955, there has been a growing recognition of Lawrence as a poet. Dr Sagar acknowledged this thesis - still, regrettably, unpublished - in his *Art of D. H. Lawrence*, but he does not seem to have built upon these perceptions since. He has, for example, continued in preferring a rejected draft of "Bavarian Gentians" to the text as it appeared in Lawrence's *Last Poems*. His preference seems to stem from an inability - which he admits - to see what the marriage of Persephone has to do with the poet's own spiritual journey. But there is no difficulty here.

Domesday Book

A Reassessment

Edited by PETER SAWYER

To coincide with the nine-hundredth anniversary of William the Conqueror's great survey of his new lands, people and wealth, the author has created this challenging new scholarly account of the most important single source for early English history, the Domesday Book. For historians and advanced students.

ISBN 0 7131 6440 9 boards 192 pages £25.00 net

Now in paperback

The Outbreak of the English Civil War

ANTHONY FLETCHER

"easily the most important book on the Great Rebellion in the past 20 years"

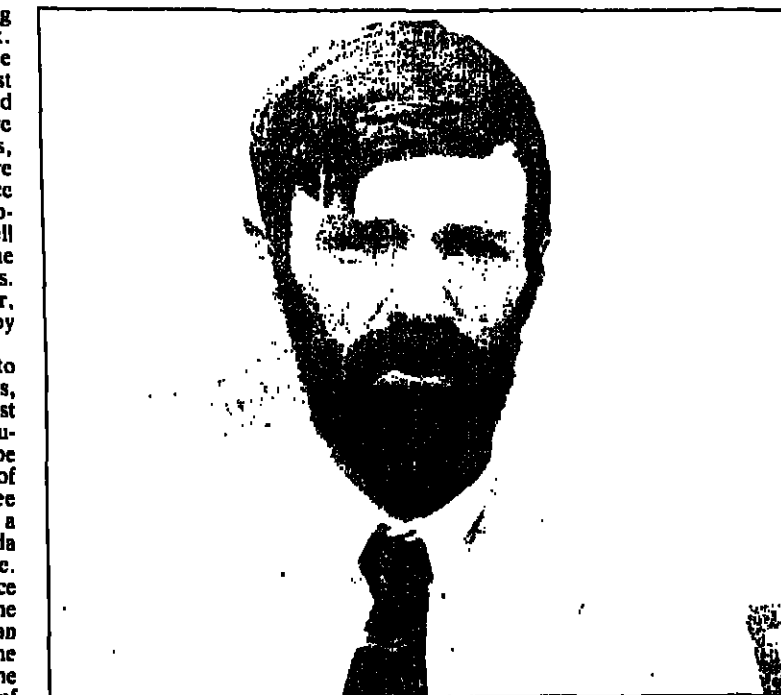
John Kenyon, *The Observer*

This is a detailed analysis and narrative of the events that, in the period 1640-1642, led to the outbreak of the English Civil War. It provides new insights both into the course of those events and into the motives of the participants.

ISBN 0 7131 6484 9 paper 480 pages £9.95 net

BOOKS

Beyond the artist's raw materials



The image of Persephone in the poem is that of a living soul embracing darkness. The poet's movement towards death "down the darker and darker stairs" is, likewise, a journey into the dark. Persephone and the poet are alike immersed in what Lawrence, imaginatively inverting Milton's image of Hell, calls the "darkness invisible" of death. However, Dr Sagar has always had problems with this piece and, indeed, cruelly misprinted it in the first edition of Lawrence's selected poems that he did for Penguin Books.

A kindred limitation imperils his response to another late work, "The Ship of Death". Unlike the previous poem discussed, this ends on a note of hope. Dr Sagar complains that there is no attempt to find imagery that will give us any clue as to how the renewal after death, of which Lawrence speaks, is brought about. It is true that we are not given a physiological breakdown of the change. But the difference between "The Ship of Death" text in *Last Poems* and its form in previous drafts is that in the latter version "out of eternity, a thread / separates itself on the blackness", and this transpires as "the cruel dawn" which, in its turn, awakens the worn shell of the body into a new life. "The frail soul steps out": a analogy would be the butterfly emerging from its chrysalis.

If the text were not enough for a full

is seen in Dr Sagar's terminology. So experienced a critic should not still be using terms such as "subjective", "objective" and "amazing dramatic skill".

It is true that the last phrase occurs in the chapter on the plays, justly privileged here in comparison with the scant notice Dr Sagar gave them in his previous books. In some ways "The Birth and Early Death of a Dramatist" is the most appealing section of the present work, especially when Dr Sagar seizes the theatre of the post-1890s. "It is difficult now to credit the degree of ignorance, philistinism, snobbery, callousness and hypocrisy of almost everyone connected with the Edwardian commercial theatre, the theatre dominated by Arthur Wing Pinero and Henry Arthur Jones." Yet, even here, something is missing. One senses a deficiency in the appreciation of the actor's art. Dr Sagar does not make enough of the fact that it was Esmé Percy, a pupil of Sarah Bernhardt, who first got Lawrence produced on the professional stage. That the silver voice of that same Edwardian theatre should have put on *The Widowing of Mrs Holroyd* is a remarkable paradox. But it is not so remarkable as that Bernard Shaw, representing another function of the theatre, should have been heard at the performance to compare, adversely, the sound of the typewriter in his own dialogue with the profuseness and vivacity manifest in Lawrence's.

Nowadays, we can feel he was right. Lawrence has burgeoned far beyond the limits prescribed by F. R. Leavis's famous book, *D. H. Lawrence, Novelist*. He is now D. H. Lawrence novelist and story, travel, and letter-writer, poet, playwright, critic. Curiously enough, Dr Sagar has little to say of this latter role. Yet Leavis, who had no mean idea of his own pre-eminence, in his final book termed Lawrence "as great a critic as there has ever been". The remark deserves some attention.

However, Dr Sagar has covered so many texts with such lucidity - if not with the final incandescence of analysis - that it would be unfair to wish him to have tackled Lawrence's criticism as well. As Leavis was wont to remark, and as all reviewers except possibly Lawrence would acknowledge, a critic needs to have his economics. Those of Dr Sagar have allowed him to become an indispensable academic specialist.

Philip Hobsbaum is titular professor of English Literature at the University of Glasgow.

Dreyfus to De Gaulle

Politics and Society in France 1898-1969

JAMES F. MCMILLAN

"delightfully stylish... An incisive and extremely readable commentary... it crowds every part of its large canvas with colourful and telling detail, yet retains a firm grasp of overall design."

Times Educational Supplement

This is the fullest and most up-to-date survey of twentieth-century French history available in English, incorporating the findings and insights of the latest research.

ISBN 0 7131 6407 7 paper 266 pages £6.95 net

The Nazi Dictatorship

Problems and Perspectives of Interpretation

IAN KERSHAW

"Absolutely up to date on the latest research... most stimulating reading... there is plenty of material for several lively seminar discussions in this valuable book."

V. R. Berghahn, author of *Modern Germany*

The Nazi Dictatorship is an attempt to synthesize and evaluate the complex historiography on Hitler and the Third Reich, drawing widely on the findings of a great deal of research, in particular by German scholars.

ISBN 0 7131 6408 5 paper 176 pages £6.95 net

NEW TITLES FROM EDWARD ARNOLD

Edward Arnold
25 Bedford Square, London, WC1E 1EQ

BOOKS

Beyond the American fringe

A Critical Introduction to Twentieth-Century American Drama
volume three: Beyond Broadway
by C. W. E. Bigsby
Cambridge University Press, £27.50
and £8.95
ISBN 0 521 26256 9 and 27896 1

This survey of American drama of the past 25 years is responsible, scrupulous, and well-informed, and provides a reliable source of information for British readers who would like to know about recent developments in the American theatre. The emphasis throughout is on performance rather than text, on collaborative ventures, on directors' theatre in which authors at times play a subordinate role. As the subtitle indicates, it is a history of off-Broadway and off-off-Broadway theatre, a history of the theatrical avant-garde.

One effect of this choice of strategy is that the commercial theatre, especially serious middlebrow drama, is under-represented, and tends to be treated dismissively, on unstated ideological grounds. Mark Medoff's *Children of a Lesser God*, to name one recent example, is an interesting, effective play and deserves more than a casual throwaway phrase; Lanford Wilson, whose plays bridge the alternative and Broadway theatre, ought to receive extended treatment in the book, rather than a listing of titles. More curiously, Rochelle Owens, whose strange, unsettling plays are nothing if not experimental, and help define the 1960s sensibility which is one of Bigsby's major concerns in the volume, is not mentioned at all, apparently because her plays weren't done by the particular experimental companies Bigsby examines in detail. But some selection is necessary in a work of this scope, and the author succeeds admirably in giving his material an overall shape, with a coherent argument, so that the reader is never swamped in detail.

The approach is historical, and at its heart is a contrast between the 1960s and the past decade, an era of expansion and one of contraction, revolutionary fervour as against counter-revolution, quietism, the cultivation of inner space. There are two helpful introductory chapters, each concerned with the relationship between the theatre and the outside world; one provides a capsule history of the period, in counterpoint with the

growth of anti-establishment drama and its gradual absorption into the establishment, and the other is a useful account of the influence of Art and other genres of the avant-garde.

Four chapters on performance theatre of the 1960s, with emphasis on the work of Julian Beck's Living Theatre, Joseph Chaikin's Open Theatre, and Richard Schechner's Performance Group, are followed by four chapters on Robert Wilson and other recent avant-garde figures who seek to create a "theatre of images", hermetic, apolitical, deconstructive. After separate chapters on the plays of Sam Shepard and David Mamet (the first a bit disappointing, the second excellent), the book ends with a long and interesting section on "the theatre of commitment", drama which, often seeking out new audiences outside traditional theatrical venues, aims at transforming consciousness in order to bring about specific political ends: black theatre, Chicano theatre, the street theatre of the Bread and Puppet company and the San Francisco Mime Troupe.

Dr Bigsby writes as a cultural historian, not as a true believer or a purveyor of advertising copy, and the perspective this approach – sympathetic yet distanced – gives him is a great advantage. I suspect that the book may have been written largely from archives, with heavy reliance on published sources available in England or obtainable in flying visits: for all the emphasis in the book on performance as communion, on the unique theatrical event, manifestos, memoirs, and rushed interviews play a more prominent role than accounts of actual productions. At times Bigsby takes the artists too much at their own evaluation, and some of the material cries out for ironic treatment. But the author's generosity of spirit is a real strength, and the book is rich in anecdotal material whose significance does not need to be underlined. The contradictions inherent in confrontational theatre aimed at educating the sensibilities of an audience assumed to be inert but at the same time malleable are shown beautifully by the angry remark of a spectator during a Living Theatre performance: "I don't hate you because you're black. I hate you because you're spitting in my face!" As a survivor of the 1960s and a transplanted American, I share the nostalgia of Bigsby and many of the artists he discusses for the decade (Bliss was it in that dawn to be alive). But, for all the rigorous historical distancing, I detect a certain soft focus in his treatment of the sixties, neglecting their darker side. Still, this is a valuable study, which performs the difficult task of making sense out of recent history, and provides a real service in making so much highly interesting, unfamiliar material available to readers.

Warren Chernalk

Warren Chernalk is reader in literature at Queen Mary College, London.

Black strategies

Black Leadership in America
1895-1968
by John White
Longman, £5.50
ISBN 0 582 49244 0

Lord Scarman's report, *The Bristol Disorders 10-12 April 1981*, concluded with an exhortation to the British to heed the late President Lyndon B. Johnson's 1960s recipe for racial harmony: reform the social conditions that breed strife. Yet the report was itself ill-informed about American research into racial problems. John White's book *Black Leadership in America 1895-1968* should help people to think constructively about Britain's black communities, in addition to serving a useful purpose for students of American history. The author has a broad educational purpose, though he does not make the mistake of adopting an admonitory tone. In explaining his credentials for writing a textbook on black history, he rightly points to his long teaching record in the field, rather than a primary research track record. White dwells on themes which have been important to other interpreters of

the black leaders. He singles out the tensions among black strategists caused by disagreement over the respective virtues of racial separatism and integration, protest and accommodation. He traces these themes in the thinking of Booker T. Washington, W.E.B. Du Bois, Marcus Garvey, Malcolm X, and Martin Luther King, Jr, after a prefatory sketch which takes us up to the death of Frederick Douglass in 1890. Thus he gives himself the opportunity of comparing his leaders within a historical framework. The accommodationist pressures were strong, he suggests, because most black leaders owe their position to recognition by the white leadership and media: only Garvey and King, in his view, triumphed on a tide of black support. Since King's murder in 1968, he believes, both whites and blacks have refrained from conferring recognition on new leaders.

While Longman have recently encouraged scholarship in the American field, with titles by Hugh Brogan and Bruce Collins, it must be said that *Black Leadership* has suffered from poor editorial oversight. It is surely a false economy to present quotations in such microscopic print. This fault is compounded by the regrettable fact that quotations from primary and secondary sources take up a large proportion of the text. The author has furthermore been allowed to quote without textual attribution, so that the

reader's eye is continually drawn to the chapter endnotes. Sometimes, as in the case of C.L.R. James, the name is given in the text but without indication. Though he is clearly and successfully writing for the general reader, the author might have been encouraged to develop his conceptualization, especially as the book is sprinkled with his own insights. In several places White intelligently discusses the problem of violence but draws no general conclusions. He also skirts the question of socialism in the passages about Du Bois and King, as well as in the case of the labour leader A. Phillip Randolph. There may be no scope for generalization here: or could it at least be said that both Du Bois and King dabbled with "Communism" and "Marxism" primarily as an expression of rage against white, capitalist American society? *Black Leadership* is an unpretentious and well-conceived book that should be of interest to students of both American and British racial problems. It will be of greatest assistance to those readers with good eyesight who can think for themselves.

Rhodri Jeffreys-Jones

Dr Jeffreys-Jones is senior lecturer in history at the University of Edinburgh.

Doorstep evangelists

Apocalypse Delayed: the story of Jehovah's Witnesses
by M. James Penton
University of Toronto Press, £18.95
ISBN 0 8020 2540 4

Nine years ago, James Penton, a fourth-generation member of Jehovah's Witnesses, published a study of that movement in Canada, subtitled "Champions of freedom of speech and worship", which rounded in their praise. In 1980, Penton was "disfellowshipped", so not surprisingly his new book markedly differs in tone from the last. "Histories written by the faithful tend to self-congratulatory piety: works by apostates are generally vituperative. Each genre invites academic distrust. As an academic historian himself, Professor Penton has sought to avoid such evaluative excesses, and in large part he has succeeded despite his not infrequent censorious comments. He brings forward information about things "on the inside" which, but for being thrown out, he might not have sought to discover, much less to recount.

The merit of his work, however, arises not from such "inside" secrets, but from a close examination of Witness policy, doctrines, and structure as revealed by a close scrutiny of the open pages of the movement's periodical *The Watchtower*. It is well known that doctrine has changed over the century of the movement's existence; indeed, Witnesses themselves allow for this in their concept of "progressive revelation". They also candidly admit that, at various times, they have erred in too confidently predicting dates for the end of this dispensation. Penton draws attention to many other changes – of biblical interpretation, organization, social policy, and ethics. Thus elders, abolished in 1932, were restored in 1971 when devout overseers declined in status. The overseers, a centrally-appointed echelon in the organizational hierarchy, regained authority in 1976. Another facet of this oscillating centralism has been the shifting balance of power within the governing body, but this is an "inside" story, which, despite Penton's account, remains tantalizingly shrouded in mystery – perhaps fittingly so for a "theocratic" body which claims God to be its head.

The shift of emphasis from the ideal of a sanctified life, as canvassed by Pastor Russell, the founder, to total commitment to evangelism, has been noted by various scholars, but Penton records other hitherto unrecognized changes. Politically, he notes the changing policy towards those who have been disfellowshipped: from the 1950s to 1974, they were completely ostracized by members; a period of less severity followed, before the hard line of total non-association was reasserted in 1981.

The previous year had seen an unusual outpouring of dissent, some of



"Let the sun shine in", a scene from the film of *Hair*, reproduced in *Blue Skies and Silver Linings: aspects of the Hollywood musical* by Bruce Babin and Peter Evans (Manchester University Press, £25.00).

which focused on recondite doctrinal issues: biblical chronology; doubt about the long-held doctrine that only 144,000 were destined for heavenly salvation while the "other sheep" were to experience earthly paradise; and whether Abraham and other patriarchs would experience a heavenly afterlife. There was also the disappointment that God's kingdom had not, as expected, been manifested in 1975. Understandably for a recent apostate, Penton devotes considerable space to these issues, but acknowledges, all said and done, that they produced only relatively minor schisms.

Discreditable tales feature in all apostate histories. Penton dwells a little on allegations of sexual licence and immoderate use of alcohol among leading officials and the workers in the movement's communitarian colonies, known as Bethels, where the vast output of *Watchtower* literature is produced. Long hours, low pay, Spartan conditions in the Bethels also attract his comment. But such are easy targets in all religious communities, from monasteries to Moonies. The inmates are there from choice and, to them, sacrifice is virtue. In the case of suppose that more sexual licence or alcoholism occurs there than among the general population: in all likelihood, very much less.

Despite recent troubles, the Witnesses continue to grow in number. That absolute growth conceals a very high turnover, but the style of "doorstep evangelism" has been the

movement, which has certainly not endeared them to the public at large, has yielded the result of almost uninterrupted growth. Penton casts some doubt on the efficiency of this method, however. Witnesses throughout the world spent 436 million hours in evangelism in 1983, but only 159,000 new Witnesses were recorded. Thus, for each new active Witness, over 3,600 hours of evangelism were expended. Evangelism, however, is an agency not only of conversion, but also of retention: how would Witnesses remain committed were they not persuaded to do all this canvassing? The figures may indicate not so much the inefficiency of the method as the increasing difficulty of converting modern, secular man to any sort of religion at all. One notes that since the 1960s more converts come from Roman Catholic than from Protestant (hence, more secularized) countries: today, Penton estimates, ex-Catholics account for 50 per cent of members.

Penton observes institutionalism, declining zeal, diminishing returns for effort, and some disenchantment within the movement. Such phenomena are predictable aspects of organizational growth, but other responses are also possible, and Penton's own disenchantment – valuable and informative as his work certainly is – should not unduly prompt the conclusion that the Witnesses may soon experience any absolute decline.

Bryan Wilson

Bryan Wilson is a fellow of St Antony's College, Oxford.

PENGUIN CLASSICS



In One Definitive Series – The New Library of World Literature



On 29 August 1985 the Penguin Classics series will undergo its first major transformation since it was founded four decades ago. On that date, Penguin Classics, The Penguin English Library and The Penguin American Library will join forces in a brand new series of Penguin Classics to form a genuinely comprehensive library of world literature ranging from Jane Austen and Aristotle to Mark Twain and Zola, from Hawthorne and Hoffmann to Hazlitt and Victor Hugo.

To celebrate the launch of the series in August, thirteen new titles will be published; and a further ten will be published in September and October (with a great many more in 1986).

New Titles in 1985

August

Bacon	The Essays	£3.95
Basho	On Love and Barley	£2.50
Chekhov	The Party and Other Stories	£2.50
Cleland	Fanny Hill	£2.95
Dostoevsky	Netochka Nezvanova	£2.50
James	An International Episode and Other Stories	£2.95
Kierkegaard	Fear and Trembling	£2.50
Mayhew	London Labour and The London Poor	£4.95
Pater	Marius the Epicurean	£3.95
Propertius	The Poems	£3.95
Richardson	Clarissa	£9.95
Richardson	Clarissa (Hardback)	£19.95
Shelley	Frankenstein	£2.95
Yuan et al	The Songs of the South	£4.95

September

Congreve	The Comedies of William Congreve
Dostoevsky	The House of the Dead
Engels	The Origin of the Family
Lamb	Selected Prose
Palsson & Edwards (ed)	Seven Viking Romances
Tolstoy	The Kreutzer Sonata and Other Stories

October

Cicero	Selected Letters
Douglas Brown	The House with the Green Shutters
Kempe	The Book of Margery Kempe
Ruskin	Unto This Last

Write now for your free full colour Penguin Classics brochure to: The Academic Marketing Department, Penguin Books Ltd., 536 King's Road, London SW10 0UH

Definitive sources of financial and economic data – essential reference tools for everyone needing to keep abreast of current trends and issues

UNITED KINGDOM NATIONAL ACCOUNTS 1985

The Blue Book

The basic reference book of national accounts statistics, annually updated to provide detailed estimates of national product, income and expenditure for the UK. The essential data-source on industry, input and output, the personal sector, companies, public corporations, central and local government, capital formation and financial accounts. Statistical tables extend over 11 years and are supported by definitions and notes.

ISBN 0 11 620155 X 130 pages £12.95

UNITED KINGDOM NATIONAL ACCOUNTS

Sources and Methods

A completely revised edition, the first for 17 years, of the companion to the Blue Book. Sources and Methods describes in detail exactly how the official national accounts of the UK are compiled and is the definitive guide for all who use the figures for either analytical or forecasting purposes.

ISBN 0 11 620199 1 280 pages £14.95

UNITED KINGDOM BALANCE OF PAYMENTS 1985

The Pink Book

Balance of payments statistics, both current and for the preceding ten years, conveniently presented for easy use by those seeking to assess UK economic trends in relation to those of the rest of the world. The comprehensive content is annotated and explained; bases upon which results and estimates have been calculated are summarised; a glossary, index and additional sources of information are included.

ISBN 0 11 620154 1 80 pages £8.95

HMSO books are available from HMSO Bookshops, Agents (see Yellow Pages) and through good bookellers everywhere

OUT NOW

BOOKS

Live and respect

Aspects of Toleration: philosophical studies
edited by John Horton and Susan Mendus
Methuen, £15.00
ISBN 041639290.3

Since 1981, the C. and J. B. Morrell Trust has supported a programme of graduate studies, fellowships, conferences, public lectures, and seminars on issues related to toleration at the University of York. This collection of seminar papers, mainly by members of the philosophy and politics departments at York is one of the fruits of that programme; and, judging by the quality of the material it contains, the Morrell money has been very well spent indeed. Every one of the papers is valuable: between them they cover some of the uglier issues of life in modern society - pornography, paternalism, the toleration of racism - and they relate them intelligently and systematically to the foundations of philosophical thought in the area.

In many ways, toleration is the central issue of liberal ideology, for it raises the whole question of whether an irreducibly plural society is possible, whether there are just and practicable principles whereby people can live and work together with those whose views and lifestyle they despise. One of the merits of the papers in this collection is their insistence that toleration is not to be identified with promiscuous approval of everything or even with moral indifference: on the contrary, we can be said to tolerate something only if we disapprove of it and have the power to stop it. So toleration cannot be based on a moral evaluation of the view or lifestyle being tolerated; it has got to be founded on independent moral reasons which in some sense can appeal to everyone.

What are those reasons? Since 1859, the debate about toleration has been conducted largely in the shadow of J. S. Mill's argument in *On Liberty* to the effect that a society which sought to stifle dissent or to punish deviance for any reason other than the harm it caused to others would pay a high price in individuality, in strength of conviction, and ultimately in social and cultural progress. Two of the papers - by John Horton and Peter Jones - discuss some of the difficulties involved in the application of Mill's "harm principle": Jones considers the harm that a person does by engaging in a risky activity (for example, financial profligacy, mountain-climbing, or failing to wear a seat-belt) in circumstances where others have a moral duty to come to his rescue; and Horton expresses doubts about whether "harm" can be given a definition which is sufficiently independent of the various rival views we are supposed to be tolerating.

In a famous passage, Mill suggested that "an opinion that corn-dealers are starvers of the poor ought to be unhesitated when simply circulated through the press, but may justly incur punishment when delivered orally to an excited mob assembled before the house of a corn-dealer." Two of the papers take this sort of suggestion a

little bit further. Alex Cullum provides a powerful critique of Horst Marcuse's view that a genuine concern for truth requires us to be intolerant of right-wing views and ideology; but he finds nevertheless reason to withhold toleration from fascist groups who use the freedom they have in modern society not for genuine participation in debate but for public shows of force and demonstrations of their capacity for violence. David Edwards discusses the recent history of blasphemy, and suggests a new principle associated with respect for religious feeling and public order on which a rational law of blasphemy might be based: "where those offended are judged to have good cause to be profoundly wounded and distressed by desecrations that are in no way arguments and left with no means of rejoinder short of violence, I do not see why (as a matter of principle) the law should not interpose on their behalf."

The most interesting papers, though, are those that go beyond the framework of the harm principle. The essay by Susan Mendus on pornography reflects the growing consensus that

we should be looking not at the effects of pornography on people - what pornography does - but rather at what it is: the depravity and insult inherent in a form of entertainment which associates the visible degradation and objectification of women with the satisfaction of some of the less attractive but more powerful drives in masculine life. Like the keyword is not "harm" but "respect". In a more theoretical piece, Albert Weale develops the theme of respect for persons, associating it convincingly with the requirement that a society must be able to justify its arrangements to its citizens and therefore that it must treat them always as potential participants in justificatory discourse. Both he and Mendus are able to show then that this principle of toleration and the queerness that we feel about its extension into marginal areas like pornography.

Jeremy Waldron

Jeremy Waldron is lecturer in politics at the University of Edinburgh.

Busy polymath

Leibniz: a biography
by E. J. Aiton
Adam Hilger, £29.50
ISBN 0852744706

Gottfried Wilhelm Leibniz (1646-1716) was at the forefront of almost every sphere of intellectual activity. Nowadays he is known primarily as a philosopher, but in fact philosophy took up a relatively small proportion of his time.

He prepared the way for modern symbolic logic and foresaw the advent of the computer (he himself constructed a calculating machine, still present in non-electronic machines). He invented the infinitesimal calculus independently of Isaac Newton; indeed, it is Leibniz's notation which is used today. He laid the foundations of topology and of the theory of determinants, and independently discovered binary arithmetic. He was the first to see the need for a concept of energy in dynamics; and he devised improvements to the design of pumps, clocks, coaches and barometers.

He made important advances in the theory and practice of librarianship and of book-keeping; he worked on the systematic codification of law; and he produced new theoretical frameworks for facilitating the re-

unification of the churches. He set new standards in historiography and textual criticism; he was one of the pioneers of scientific linguistics; and he was a possible poet in three languages. And this list by no means exhausts the range of his original work.

Until now, the lack of any adequate biography has made it difficult to see how one man could have combined all this activity with the onerous duties of librarian, historian and political adviser to the Court of Hanover. Since the middle of the 19th century, the only comprehensive work has been Müller and Kröner's *Leben und Werk von G. W. Leibniz* (1969) - a chronological table rather than an actual biography. The position is now radically transformed, however, by the appearance of Dr Aiton's book. Here at last is a fascinating, scholarly, balanced and reasonably comprehensive account of how Leibniz's intellectual pursuits fitted in with his other doings. It may lack the completeness of Müller and Kröner, but it is not intended primarily as a research tool for Leibniz scholars.

Aiton's principles of selection are almost always sound, giving due emphasis to Leibniz's efforts at reunifying the churches, to his involvement in politics, and to his complex relationships with his various employers, patrons and friends. The only serious omissions seem to be of any reference to his continuing involvement in alchemy, to his innovations as a librarian, or to the details of his calculating machine.

As most of Leibniz's activities were in the realm of ideas, Aiton quite rightly devotes considerable space to expounding Leibniz's thought in all major areas - so much so, that to call the book a mere biography is perhaps a misnomer. However, to include an account of Leibniz's thought poses a number of problems for the biographer, the most fundamental of which is whether to treat his developing thoughts in different spheres diachronically or synchronically - that is, whether to structure the book so that each theme is given a separate chapter or so that each stage of his development is treated across the whole range of themes, linked with his personal life and social background.

Aiton adopts the synchronic approach, promising to "trace the evolution of Leibniz's thought, within the context of the social, political and intellectual background". This promise is certainly fulfilled in the case of Leibniz's thoughts about concrete problems, such as the uniting of the churches, Hanoverian politics, mining engineering, and the founding of learned societies. But in such matters, reference to the relevant context would be equally possible in a diachronic treatment. In the case of more

abstract areas, such as metaphysics, logic or dynamics, Aiton says little about any cross-fertilization of ideas between disciplines; nor does he carry out his apparently Marxist programme of explaining the evolution of Leibniz's thought in terms of his socio-political circumstances.

The consequence of this is that there are no perceptible gains to outweigh the overwhelming drawback of a synchronic treatment - that it disrupts the exposition of the development of Leibniz's thought within any given field. For example, the book contains all the elements of a first-class chapter on the life-long dispute with Newton over the invention of the calculus; but the only way readers can fit the whole story together is by looking up "priority dispute" in the index, where they will find ten different entries spread over nearly 300 pages. The position is even more serious in the case of broader topics, such as dynamics and metaphysics, where it is difficult to keep track of how Leibniz's theories changed through time, especially in the absence of any cross-references in the text.

A further problem facing the Leibniz biographer is that of deciding the level at which to pitch the exposition of Leibniz's ideas. To include all his major ideas and at the same time to make them accessible to the lay reader would require far more than a single volume. Aiton is therefore perfectly justified in directing his account to those who already possess quite advanced mathematics and mechanics. In the case of philosophy, however, he tends to fall between two stools. His general method is to expound Leibniz's philosophical ideas in the form of summaries of his more important writings or sets of correspondence during any given period. For someone already well versed in the history of philosophy, these summaries will be largely unnecessary and repetitive; for the non-philosopher, they lack sufficient explanation or comment to provide an entry into Leibniz's philosophical ideas.

However, although the book is flawed, the flaws arise from the very ambitious nature of the task Aiton has undertaken. He may not have come up with the optimal solution of an intractable set of conflicting requirements; but it remains the case that scholars now for the first time have at their disposal a coherent, judicious and eminently readable biography of Leibniz, and one which is also detailed enough to serve as a valuable work of reference for Leibniz scholars.

George MacDonald Ross

George MacDonald Ross is lecturer in philosophy at the University of Leeds.



Leibniz

Inquiring minds

Skepticism and Naturalism: some varieties
by P. F. Strawson
Methuen, £10.95
ISBN 0416390706

The Significance of Philosophical Skepticism
by Barry Stroud
Clarendon Press: Oxford University Press, £15.00 and £6.95
ISBN 0198247303 and 8247613
Perceptual Acquaintance from Descartes to Reid
by John W. Yolton
Blackwell, £19.50
ISBN 063113431X

How significant is scepticism? Does it form an important challenge to reason, and so to philosophy as the guardian of reason, forcing it to provide an elaborate and valid defence of the most central of our beliefs? Or is it in fact a mere dummy opponent, allowing the philosopher to proceed untroubled with quite different interests, safely ignoring it? Is it even the case that the famous philosophers frequently cited as promoters of scepticism or as defenders of central beliefs against scepticism were really interested in scepticism at all? These questions form the centre of these three books. Strawson's is a short and elegant treatment inclined to dismiss the importance of both sceptical argument and the need for philosophical defence; Stroud engages considerably more fully and at much greater length with scepticism to try to bring out that, and why, such arguments are important; and Yolton speaks

a reinterpretation of Descartes, Hume, and other lesser known philosophers designed to show that they were not really as engaged in promoting or resisting scepticism as now seems to be the case to us.

Strawson finished his justly famous book *Individuals* (1959) with the remark "if metaphysics is the finding of reasons, good, bad or indifferent, for what we believe on instinct, then this has been metaphysics". The remark is an adaptation of an aphorism of P. H. Bradley and expresses Strawson's support both for a subject known as metaphysics and the conviction that such a subject proceeds by the production of reasons or argument. Something over 25 years later we still get support for what is, on both occasions, called "descriptive metaphysics".

However, the attitude to argument has changed. The spirit of the earlier work was the spirit of Kant, and though in the current work Kant is still called the "greatest of men", philosophers, the spirit of Kant is now more the spirit of Hume. Among the moderns it is Wittgenstein, and Wittgenstein's view of a Humean spirit, who has the largest presence. The key term to signal this, which appears in the title of the book, is "naturalism". In the end philosophy describes facts about human and other nature; it assembles reminders about how we are. Ultimately, it does not argue or produce reasons for what we believe on instinct, for any such argument is both impossible and unnecessary.

Such is the overall feeling of the book. However, Strawson wants to distinguish between two kinds of naturalism and show how they both operate in several quite specific cases, not both for a subject known as metaphysics, but for a subject known as naturalism. There is what he calls "reductive" or "hard" naturalism, which takes the natural facts to be other than what they

are originally or instinctively regarded (so that facts which seem to be about the mind, for example, are really about the body) and there is "soft" naturalism which holds that things are really much as we originally take them to be. Strawson's sympathies are more with the latter kind of naturalism, but he also wants to show that the former does not support a global scepticism. The aim of this latest project is to keep us happy with where we were, philosophically thought that we were, even once we have started philosophizing. The trick is, as in parts of the later work of Wittgenstein, to prevent the relevant questions even arising; for example, by showing that they are meaningless, or ill-formed. The trouble is that, mistakenly or otherwise, these questions nevertheless do tend to keep on arising.

Hume is fairly enough quoted by Strawson as holding that nature determines us to judge just as it determines us to breathe; that is, that there is a natural necessity about how we think which goes beyond reason. However, Hume also held that it was part of our nature to look for reasons for those things which we naturally believe. Barry Stroud, whose 1977 book on Hume was designed to bring out the naturalism in Hume, nevertheless now wants to show in his latest work how the sceptical question cannot be easily eluded or avoided. Using as his stalking horses Descartes and Kant and, of the moderns, Quine, Moore, and Austin, he patiently, carefully, and clearly examines why the attempts to head off scepticism or to refuse to let the question even properly arise, will not do. As he says, scepticism, or at least the spirit of it, is questioning, and genuinely open-minded; the book even ends on an indecisive note, not certain whether a case can be made, which decisively heads off scepticism.

However, Stroud is pretty clear that attempts to say that the sceptic misuses language, or presupposes some picture that he is not entitled to, or generally lacks sense, will not work.

Both Stroud and Strawson use such historical figures as Descartes and Hume in a current argument; indeed because the logical order of exposition of Stroud's book means that he finds it natural to consider G. E. Moore before Kant he can say things like "Kant thinks that Moore's proof does not . . .", apparently oblivious of the fact that Kant died so long before Moore was born that he would have had very little chance of thinking anything at all about him. Descartes is used, as in numerous philosophy courses, as a means of getting scepticism into play. Yolton's book, by contrast, is rigorously historical. He wishes to show that both Descartes and Hume were both much more interested in the actual psychology of perception and much more inclined to take perception as direct acquaintance than is standardly thought. If perception is not representative but direct, the room and motive for scepticism disappears, and this should not therefore be taken to be at the centre of their interests.

Strawson's and Stroud's work is recommended for students of philosophy from the second year upwards (although both are quite accessible for those with no philosophical background). Yolton's is for the historian of thought suspicious of the way philosophers move around counter to the names of the great, dead philosophers inscribed on them.

Ross Harrison

Dr Harrison is a fellow of King's College, Cambridge.

BOOKS

Global locusts

The Natural Alien: humankind and environment
by Neil Evernden
University of Toronto Press, £14.50
ISBN 080202552.8

Neil Evernden has set himself a difficult task. It is to question the legitimacy of the worldwide movement among industrial nations to protect the environment. The gathering power behind the movement is one of the astonishing features of our time. From Tokyo through Europe to North America, millions of people belong to conservation societies and anti-pollution pressure groups. Every year new laws to protect landscapes and species are passed, and every year more curbs are put upon the discharge of wastes into air and water.

At the international level, there are agreements between nations to remedy damage already done: a convention to clean up the Mediterranean; a determination among EEC countries (except Britain) to reduce sulphur emissions by 30 per cent; a consensus to limit the hunting of whales. Furthermore, these efforts are succeeding: sea-poules in England are beyond the memory of anyone under 30; fish could be caught in the Thames off the shores of the Houses of Parliament; it is an indictable offence to expel bats from those parts of your property where you don't reside yourself.

Evernden's thesis is that the environmental movement has failed to achieve its goals and will continue to fail. Indeed, he questions whether we have goals; and if we have, they are the wrong ones. He admits on the first page that "this may sound rather perverse." Never mind. Perversity stimulates discussion. Evernden deserves a hearing; he asks only to hold our attention for 144 pages.

He opens his case well. What, he asks, are the philosophical assumptions made by people who campaign on behalf of the environment? And what is the epistemology of the techniques used to protect the environment? The campaigners fall into two broad categories. There are those who regard air, water, natural habitats (called "wilderness" by Americans), and the reservoir of genes in undomesticated species, as resources which are becoming contaminated or scarce. It is therefore prudent in the public interest to conserve them - a simple policy of expediency, easily understood even by politicians, and sufficiently vote-catching to justify public expenditure. The other category of campaigners are those who believe in a proposition that cannot be proved empirically, namely that everything in what is called "nature" (that is, not human or made by human beings) has intrinsic value for its own sake, not just because it is wild or even beautiful in the opinion of human beings.

Technical geology

Manual of Geology for Civil Engineers
by John Pitts
World Scientific: Wiley,
£29.90 and £13.80
ISBN 9971 978 059 and 978 121
Engineering Geology
by J. C. Beavis
Blackwell Scientific, £22.50 and £10.80
ISBN 086793 2007 and 1280

Geology has long been a component of undergraduate civil engineering courses. Indeed, William Smith (1769-1839), the father of British geology, was a civil engineer by profession. Although "engineering geology" has been recognized as a sub-discipline for over a century, it has developed into a more quantitative form within the past 20 years. Together with soil and rock mechanics it has come to form a core subject of geotechnical engineering, a

specialization usually taught at post-graduate level. These two books, however, are intended to fulfill the geological requirements of undergraduate civil engineers, rather than those of more specialist courses.

Both authors are aware that radical changes in engineering education are making greater demands on time, so that the more esoteric aspects of geology are becoming, in Pitts's words, "an unfashionable luxury". However, although they both attempt to present an adequate view of engineering geology within the confines of a short primer, the two authors adopt significantly different styles. Professor Beavis (of the University of New South Wales) assumes some elementary knowledge of geology, whereas Dr Pitts (of Nanyang Technological Institute, Singapore) does not. Consequently, the latter adopts a more direct teaching approach, but covers less ground. Subject areas common to both are rock composition and classification, properties and mechanical classification of rocks masses, the weathering-transportation-deposition cycle, engineering soils, geological/geotechnical maps, and ground investigations (including core logging and the collation of rock mass data). Three addi-

There are flaws in the assumptions of both kinds of campaigners. Those who rely on prudent expediency have to do a cost-benefit reckoning every time they make a decision. Will the possible reduction in acid rain be worth the certain high cost of cutting sulphur emissions from power stations? The welfare of the environment is at the mercy of economists. The assumptions of the intrinsic-worth campaigners are flawed too. If life is sacred, as the defenders of animal rights claim it is, why stop at rabbits, rats and mice? Are not mosquitoes, wasps, houseflies equally sacred?

As to the techniques used to protect the environment, Evernden believes that environmentalists "have come to adopt the strategy and assumptions of their opponents." He reminds us of the totally contradictory views of the two kinds of people who call themselves ecologists: on one hand, the vague and emotional sentiments of those people (uncharitably described by someone as "long-haired lentil-eaters") who regard ecology as "wholistic [sic], receptive, trustful . . . deeply grounded in aesthetic intuition" and who reject the objective rational approach to the study of nature; and, on the other

hand, professionals whose aim is to apply the rigorous reductionist techniques of the exact sciences to the study of communities of plants and animals.

The rest of Evernden's essay is an attempt to persuade us that (in Wordsworth's words) "we murder to dissect": the ecologist, who is the expert called in to advise on policy for the environment, applies a set of assumptions which blind him to the reality of nature. He has towards everything except himself the attitude of I-it and not the attitude of I-thou. So all environmental policy has its foundations in sand. As for the holistic "ecologist", he must inevitably realize that he is an alien among living things because even his lifestyle does not fit him into a niche in the environment; for humans are "global locusts" whose inevitable destiny is to exploit and destroy.

So what is to be done? So far as practical politics are concerned, nothing. Even organized protest from holistic "ecologists" is (if I understand the argument) futile. All that those of us who are concerned about the environment can hope to do is to cultivate in ourselves the I-thou faith and, like members of a contemplative

Close quarters

The Principles and Practice of Electron Microscopy
by Ian M. Watt
Cambridge University Press, £40.00
ISBN 052125557.0

The idea that we can study the detailed structure of the solid (or at least, fairly solid) materials around us just by looking at them is very appealing, especially as microscopes are now capable of making structure visible on all scales from one millimetre to one atom (about two ten-millionths of a millimetre). So why are all students of matter, whether it be biological, geological, metallurgical or semiconductor, not unravelling the inmost secrets of their subjects just by looking at a picture or two? The answer lies in the difficulty of persuading a microscope, even an electron microscope, to produce the highest resolving power of which it is in principle capable. In fact direct viewing of atomic arrangements in solids is only possible in very specialized circumstances which are not generally feasible for most specimens.

Ian Watt's book is devoted to the remaining 99 per cent of applications of electron microscopy, which tend to be easier than resolving atoms, but still extremely complex in achievement and interpretation. The book is aimed at the non-microscopist who encounters electron micrographs and wishes to know more, since without an understanding of how each type of microscope works, you would have little chance of appreciating the information contained in the images.

Electron microscopy is a portmanteau phrase which embraces the very different techniques of scanning electron microscopy (SEM) and transmission electron microscopy (TEM) and

their applications to a huge range of subjects, of which the most prominent are biology and materials science. The two techniques, though superficially similar because they both exploit fairly high-energy electrons, achieve their effect in very different ways. The TEM operates in a way closely analogous to the light microscope as it is commonly used by the biologist - a beam of illumination (in this case electrons) is passed through a thin specimen, a magnified image being produced by the action of one or more subsequent lenses. The SEM, on the other hand, works more like a television camera: each point of the object is examined in turn as a fine beam of electrons is scanned across its surface, the resultant image being displayed at a larger scale on a television screen.

With a TEM we can study the internal structure of a specimen, while with a SEM we can study its external morphology. In both instruments the resolving power is far superior to that of a light microscope, largely because the wavelength of the illuminating electrons is much shorter than that of light. Neither instrument, however, achieves the resolution of which it appears in principle to be capable (about one-fortieth of the diameter of an atom), mainly because experimentalists are not satisfied with principles and insist on putting real specimens into the microscope, thus degrading its performance.

Watt's book covers all these topics, and more, with a tremendous attention to the detail of the hardware and the many potentially misleading artefacts. The book is particularly strong on SEM techniques; indeed, I have never before seen so many pictures of effects which the practising microscopist knows to bedevil his art but which are rarely adequately explored in textbooks. Although this may not appeal to the "non-microscopist", who may feel that the subject is difficult enough already, it can only be helpful to the "user" of one type of microscope.

I doubt very much whether there are many practising microscopists who would not learn something about their instrument, or why they use it in the way they do, from reading this book. There are, as you might expect in such a broad treatment, some substantial omissions. Most glaring of these, though readily admitted in the text, is the total failure to consider the extensive and important topic of image contrast from crystalline specimens in the TEM.

Watt's book provides a broad qualitative view of most of electron microscopy. Although it is better on SEM than TEM, and serves the biologist better than the physical scientist, it could be a useful addition to any general electron microscopy laboratory. The index is adequate; and the bibliography superb, guiding the reader not only through other books and review papers but also the regular series of handbooks, national and international conference proceedings, and even the most useful scientific periodicals.

Peter Goodhew

Peter Goodhew is reader and director of the Microstructural Studies Unit at the University of Surrey.

geology of the past million years is a case in point, since site investigations in northern Europe are commonly concerned entirely with superficial deposits which blanket much of the surface. Details of glacial history and the complexity of the deposits are important in relation to investigation practice.

Short primers cannot be expected to cover the same ground as more extensive and rigorous textbooks on engineering geology. Nevertheless, as they provide quick sources of information for students, these two books should complement more comprehensive texts.

Roy Taylor

Roy Taylor is reader in engineering geology at the University of Durham.

A second edition of A. C. McLean and C. D. Gribble's *Geology for Civil Engineers*, revised by C. D. Gribble, has been published by Allen & Unwin at £20.00 and £9.95. And a collection of papers on *Archaeological Geology* has been edited by George Rapp, Jr and John A. Gifford and published by Yale University Press at £39.00.

Cambridge University Press has published paperback editions of the following titles: *The Global Climate*, edited by John T. Houghton, is available at £11.95 (for a review of the handbook, see the issue of 6th July 1984); and Martin Glaessner's *The Dawn of Animal Life: a biographical study* is available at £9.95.

FINE QUALITY

BOOKCASES

A PROFESSIONAL BOOKCASE

Exactly as supplied to University, College and public libraries, can be delivered straight to your home. Each bay is 6ft 6in high by 30in wide by 6in deep and has 5 adjustable shelves and a fixed base. Simple to erect and can be extended by any number of bays. OAK or MAHOGANY finish.

For details write to:
B. Savola Ltd.
Library Furniture makers,
Dept TE8, Aume Works,
Rendelsham, Suffolk,
London E8 8PS.

BOOKS

Lasting effects

The Nature of the Child
by Jerome Kagan
Basic Books/Harper & Row,
£14.95 and £4.95
ISBN 0 465 04850 1 and 0106 338013 X

As professor of psychology at Harvard University, Jerome Kagan has a considerable influence on the popular view of children and their development. As co-author of a long-standing, best-selling text on child psychology, he has shaped the views of millions of psychologists, paediatricians, teachers and nurses, with some impact on everyone concerned with the developing child. He is a very popular lecturer. The only person like him is David Bellamy. Both share a tremendous enthusiasm that picks up the listener and carries him on, somewhere. I have always enjoyed hearing Kagan speak, but have invariably wondered afterwards what was the aim of the barrage of facts he had thrown out over the preceding hour. His previous books, mostly with co-authors, lacked his own joyous enthusiasm and are to my mind joyless assemblages of experimental results, as unmemorable as a four-year-old's tachistoscope.

As a researcher, Kagan is best known for having undertaken a longitudinal study of a group from birth to maturity – an immensely brave undertaking for one man, however talented. Indeed, no one would lightly embark on a study that would take 25 years to complete. But it does provide some seasoning for the larger "official" studies, like our own National Childbirth Study. In addition, he is known for some amazingly eclectic studies of infants of various ages, for studies in which changes in facial expression are gathered with changes in heart rate and looking behaviour to tell us something about the mind of the developing child, and for some intrepid trips to look at child rearing in non-American cultures.

I had hoped that this book, written alone, would capture and convey Kagan's own enthusiasms and prejudices, the forces and beliefs that have sustained his long career in child psychology. Before reading it, I did not know what to expect in it. My reaction, however, is disappointment on all counts. The book is light on "facts" but flows like a river of fact with much the same sparkle. It is more the book of a weary castaway than of the intrepid venturer I used to know. Indeed, the mood of the book is given in his closing paragraph:

My own image of a life is that of a traveller whose knapsack is slowly filled with doubts, dogmas, and desires during the first dozen years. Each traveller spends the adult years trying to empty the heavy load in the knapsack until he or she can confront the opportunities that are present in each fresh day. Some adults approach this state; most carry their collection of uncertainties, prejudices, and frustrated wishes into middle and old age trying to prove what must remain uncertain while raging wildly at ghosts.

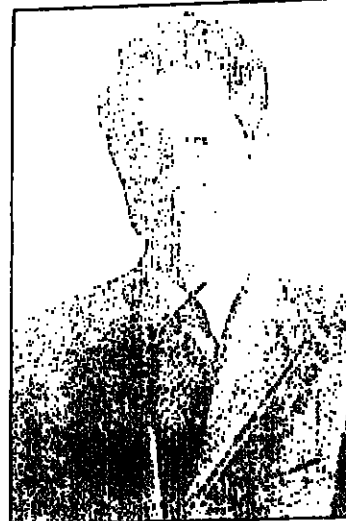
What has produced this profound pessimism? The book addresses itself to five themes: maturation versus experience in development; continuity versus discontinuity in life; whether people fall into classes or can be viewed as points in continua; the appropriate level for psychological description ("is anxious" versus "has a high heart rate"); and finally, the role of subjective versus objective characterizations of psychological events. Kagan's conclusions, after looking at infancy, morality, emotion, thought, connectedness and the role of the family, is that there is not much stability throughout the life span; that even where there is some, this is probably due to biological rather than psychological factors; that our studies are bedeviled by a lack of consensus on measurement; and that many of the studies that have been done are meaningless because they fall even to attempt to work out the subjective consequences of some objectively described event. "I was glad that Kagan

had made the last point. The child's understanding of what others do is as important as what they do. Failure to take this into account has undermined a great deal of expensive psychological research." As Kagan says, "rarely will there be a fixed consequence of any single event – however traumatic – or special set of family conditions."

I fear, however, that the message in all of this may well be widely popular; that, in general, no one is a prisoner of his or her past – we can all break loose and be reborn – and that in particular, parents need not agonize that what they do will have irreversible consequences for their children. Any broad acceptance of these notions would be disastrous, although I can understand why Kagan feels pressed to utter them. Psychology is, almost certainly, the only science where theories can change the data, can become true. Many scientists have wondered whether anyone had an Oedipus complex before Freud. Older clinicians frequently say that they never saw anyone with an identity crisis before Erikson wrote about it. As Oliver Twist shows, maternal deprivation did not produce psychopathy and was not seen as a reason or excuse for psychopathy in the 19th century. People seize on psychological theories and act as if they were true, thereby making them true. The major developmental theories have made many individuals and many parents less happy than they otherwise might have been.

But that should not lead us to withdraw from developmental theory, as Kagan has done. Such theories predate the science of psychology and are found in many cultures with no formal science of any sort. To say they are absurd does not help. Such shying away is also of no help to a paediatrician or psychologist faced with a blind child who has had a sight restoration operation but who persists in acting like a blind child. To help that child, I have to understand how her early experience produced this long-term and potentially long-lasting effect. Only if I can get into her own subjective frame, can I help. Only if I understand how that frame was established can I help prevent it occurring. Kagan stays away from extreme cases where stability in development is tragically obvious.

To get at less obvious stabilities, Kagan does point out the way. We



Jerome Kagan.

have to enter the subjective frame of the child to understand how external events are being interpreted. The same events will have different effects, if seen in different frames. The child's frame, his way of understanding the world, will be a joint product of the competences the child brings into the world and the experience he has had in the world. It is here, however, that the book causes its greatest disappointment. If we are ever to understand subjective frames we must begin as early in their elaboration as possible, in infancy. The past 20 years have seen a revolution in our knowledge and understanding of infancy, but that revolution has passed Kagan by. He completely ignores work done by his own students, colleagues and peers. His chapter on infancy, for example, could have been written 20 years ago. The theory outlined was inadequate then, more so now. Its attempted extension, to morality, is pointless.

If Kagan would load his knapsack with some new information and ideas, they might push out the old ones which seem to have crushed his enthusiasm. He might then produce the book that this one's cover might lead us to expect.

T. G. R. Bower

T. G. R. Bower is professor of psychology at the University of Edinburgh.

Legged robots

Walking Machines: an introduction to legged robots
by D. J. Todd
Kogan Page, £15.00
ISBN 0 85038 932 1

Walking machines are vehicles in which more conventional tracks or wheels are replaced by articulated systems of levers. Each joint of such a system tends to be individually powered and coordinated by a central controller. There can be very good reasons to go to such trouble: legged vehicles can step over obstacles and potentially even wide chasms; they can achieve a smooth ride over rough ground; and they cause less ground damage than do tracks. Indeed, a large proportion of the world's surface simply cannot be reached using wheeled or tracked transport.

Yet it is only recently that the increased sophistication of available computing has meant that it is becoming feasible for the complex control task to be managed automatically. Even so, the required control algorithms are very complex, requiring as they do varying gait depending on the type of terrain and speed of travel. All this ideally requires substantial sensory feedback. An idea of the advanced nature of the task can be gathered by shutting one's eyes and trying first to walk and then run upstairs without the benefit of visual feedback; impair your sophisticated balancing systems with a little alcohol and then try.

The massive potential of legged vehicles is slowly being recognized, but practical designs still tend to be very slow and trapped in a few select research laboratories. This fascinating book, an excellent introduction to all aspects of legged locomotion, should help improve awareness. Although the subject is esoteric, the book should be accessible to the general reader, even if he has no intention of studying it in detail. This may be due to the anthropomorphism of the whole field: there can be few activities in robotics (in its widest sense) which can instil such an

instinctive empathy as when a device actually walks. Whether it is the spider-like "Odey" 1" or "Tito II", the human-like bipeds from Waseda University, or even the alien-looking hopping monopod devised at Carnegie Mellon University, legged devices somehow seem to inspire a certain sense of familiarity. Thus, when the text discusses different gaits and structures, it naturally flips between references to nature and engineering.

Todd first traces the history of the development of walking machines from the original ideas of man-amploft and military rough-ground transport to today's diverse academic and industrial research projects. Then, in a chapter on the general principles of land locomotion, he explains (with hardly any mathematics) such concepts as energetics, discusses energy losses, and considers tails as balancing aids and methods of getting up after falling over. He also reviews types of gait: although everyone is familiar with trotting, walking, and so on, for quadrupeds, what are the equivalents for humans, and octopods?

Todd continues by outlining the mechanics of legged vehicles, the choice of leg number and arrangement, mechanical designs, and actuation methods. He then describes the aims of control theory and the methods of modelling and control being implemented in both highly dynamic robots and multi-legged machines. Short mathematical sections here (about seven pages in total) may not be readily accessible to all readers. Nevertheless, although the treatment of control theory will be of interest to the specialist, it could be skipped by the more general reader, without any loss of understanding.

The book ends with discussions of the computing and sensing systems necessary for walking robots, followed by highly readable summaries of current walking machine research projects, and the potential applications of the whole field. It should be of interest to a far wider readership than its title might suggest.

Peter Scott

Peter Scott is with the consulting group PEP Ltd, London, and author of 'The Robotics Revolution' (Blackwell, 1984).

mals get a quarter of the text, with thorough accounts of seals by W. N. Bonner, whales by Ray Gambell, oceanic birds by W. R. Siegfried, and penguins by Bernard Stonehouse.

The final quarter of the book consists of three rather loosely linked sections. D. W. H. Walton and Nigel Leader-Williams describe the subantarctic islands and the impact of ecological change – but do not really assess their significance in terms of global island conservation. Andrew Clarke contributes a good discussion of the interactions between the components of marine, terrestrial and freshwater systems; and Bryan Sage describes the history of conservation and exploitation, but their efforts at synthesis only partly succeed in drawing together the preceding separate accounts. Sage goes under 20 pages for his review, and uses some of them to duplicate material about resource exploitation in the chapters on seals, whales and geology. It is unfortunate that his text seems to have gone to press too soon to record a series of recent international discussions and publications on environmental resource management in Antarctica in which IUCN has been closely involved.

This book meets one of the stated aims of the series – the review of present knowledge – well. It is clearly written, concise, well illustrated and indexed, with good only up to 1982. It is probably the best summary available for the scientist wanting to get a broad-ranging view of the ecological characteristics of the region. However, the development of a conservation strategy for Antarctica – now being talked about internationally – poses a urgent challenge to ecologists, and it is a pity that the book does not discuss more fully how the world can best safeguard the assets frozen in its deep south.

Martin Holdgate

Martin Holdgate is chief scientist of the Department of the Environment, and was previously senior biologist of the British Antarctic Survey.



This Victorian engraving depicting the University Museum in 1860 is reproduced in A. V. Simcock's *The Ashmolean Museum and Oxford Science, 1683-1983* (Museum of the History of Science, £3.00).

causing them to change. A short history of the evolution of scientific exploration, from separate, generally brief, national expeditions to the present outstanding programme of international cooperation, leads to chapters on Antarctic physical characteristics, terrestrial and freshwater habitats, marine ecology, marine mammals and birds, which take up three-quarters of the book.

Almost inevitably, these sections are uneven in length and detail – partly because knowledge is itself uneven. In the early parts D. H. Elliot contributes a particularly informative review of geological history, R. B. Longton a substantial account of terrestrial plant life, and Julian Bridle a good summary of the various – and sometimes

bizarre – freshwater environments. In contrast, the section on land invertebrates is brief; and, despite a good deal of recent research, microbiology is omitted altogether. The marine section follows a similar pattern. Saved El with only perfunctory reference to krill fisheries – perhaps expecting (mistakenly) that these would be considered fully in the final part of the book, which deals with conservation and exploitation. Benthos and fish are well treated by G. B. Picken and Karl-Hermann Kock; and M. R. Clarke provides an interesting note on cephalopods (octopus, squid, cuttle fish), an important but largely neglected component of the ecosystem. As usual in 'Antarctic' books, birds and mam-

BOOKS

HISTORY

Under canvas

A Nation in Arms: a social study of the British Army in the First World War
edited by Ian F. W. Beckett and Keith Simpson
Manchester University Press, £25.00
ISBN 0 7190 1737 8
The Unknown Army: mutinies in the British Army in World War I
by Glendon Dallas and Douglas Gill
Verso, £18.50 and £5.95
ISBN 0 86091 106 3 and 814 9

When the First World War began, the British Army was a small regular force of roughly 250,000 men. It was a proud and professional body, but puny alongside the massive armies of the other great powers. By the end of the war, however, it had been transformed into a major national army of over five million men. The main steps in that expansion are well-known but, until quite recently, there has been a tendency to take this transformation for granted. The two books under review indicate a rather different perspective. Their central concern is with the complex social world of this new army and the ways in which it mirrored the class structure of early-20th-century Britain. The authors by no means exhaust the subject, but they demonstrate how much can be gained by seeing the history of an army as an aspect of general social history.

The idea of a British nation at arms had been vigorously, but unsuccessfully, canvassed before 1914. Haldane had launched his version of the concept, but was well aware of the opposition to "militarism" both in the Liberal Party and in the country at large. Only some 8 per cent of the male population had experienced training in the auxiliary forces by 1914. That was scarcely an adequate basis for the speedy creation of a mass army. After the outbreak of the war, new recruits flooded in, though not immediately, and there were significant sectoral and regional differences in the response. Nearly half a million men – the highest monthly total – volunteered in September 1914 and the figure reached two and a half million by December 1915. The following month, the first of the Military Service Acts was passed

and the new conscripted army began to take shape.

Opposition to conscription had been widespread, and political as well as practical considerations had delayed its introduction – though the resistance proved, in the event, to be less substantial than had been anticipated. Even so, the steady introduction of hundreds of thousands of men who were being compelled to fight necessarily had repercussions on the atmosphere and outlook of the army. It is worth remarking, however, that hundreds of thousands of men were given exemption on either health or occupational grounds, and a much smaller number on grounds of conscience.

Beckett, Simpson and their colleagues then proceed to examine in detail the structure and administration of this force. Spies contribute a characteristically clear and informed piece on the regular army as it existed in 1914, embellished by tables illustrating the social composition of the military leadership, its rural/urban background, and the trades of men who offered themselves for enlistment. Simpson draws on memoirs and other material to present both an impressionistic sketch of the officers and statistical detail on their backgrounds, careers and the casualties they sustained. There was much debate on the subject of the "new" officer

who was thrown up by the war. Indeed, the theme that runs through the volume (particularly in the chapters by Hughes on the new armies and Beckett on the Territorial Force) is the tension between the old and the new in practically every aspect of military life.

We learn a great deal about recruitment, the terms and the composition of regiments. Sometimes the traditions of the latter could be upheld with some semblance of continuity, but more often the decimation of officers and men meant that battalions were filled up with men from whatever source was available. The erosion of tradition was inevitable. New officers and new men mingled, or remained aloof, in fighting contexts which brought into question the social conventions of peacetime. Simpson, in a most interesting essay, explores the tensions between soldiers and civilians in Britain itself and across the Channel. Winter displays his customary expertise in demographic matters, though in a summary chapter there must inevitably be some oversimplification of the social picture. Finally, Jeffrey looks at the problems involved in disposing of this army with the return of what passed for peace. He discusses the extent to which conscripts were influenced in the 1920s by their experience of army life, and how, in turn, the peacetime army had changed from the regular army of 1914.

Douglas Gill and the late Glendon Dallas are interested in the same general area. They discuss changes and continuities in recruitment, style and ethos in a competent and clear fashion. After chapters of general discussion, some of which seem rather too wide-ranging for a book with an emphasis upon "incidents of rank and file rebellion", the authors focus on the events at the Etaples camp in 1917. The mutiny is carefully described – they have had an article in print for a decade – and we are told what lessons the army learned or failed to learn in its handling of this affair. The book concludes with a consideration of the unrest surrounding demobilization after the war was over.

The authors tell the story adequately but their account would have gained in subtlety if they had been able to read and reflect on the Beckett/Simpson collection. The reader who can consult both books is in a fortunate position. Together they emphasize that the creation of the wartime army was not a process free of conflict: even so, with all its shortcomings, it remains a remarkable achievement.

K. G. Robbins

K. G. Robbins is professor of modern history at the University of Glasgow.



Grain prices

The Agrarian History of England and Wales
Volume V 1640-1750
part one: Regional Farming Systems
part two: Agrarian Change
edited by Joan Thirkirk
Cambridge University Press, £35.00 (part one) and £55.00 (part two)
ISBN 0 521 20076 8, 25775 1 and 26257 7 (hbk set)

Given the predilection of agricultural historians for unearthing agricultural revolutions (five in the three centuries before 1850) it comes as something of a relief to find that this volume characterizes the century after the Civil War as a period of agricultural depression. While the demand for agricultural products remained static, output increased, so that underconsumption and overproduction led to a sustained fall in grain prices.

Faced with these adverse conditions farmers adopted a variety of strategies to protect their livelihoods. Some increased their production of grain and other crops, while others switched to livestock production: a few were more adventurous and took to growing a variety of industrial crops such as liquorice, hemp, and dye plants, while some turned to horticulture and urban markets. Depression, then, prompted innovative and enterprising, although the full harvest of this ingenuity was not to be reaped until after 1750, according to Joan Thirkirk the editor of this volume.

agricultural innovation during the period 1640-1750 paved the way for an agricultural revolution but does not itself deserve that appellation.

This conclusion is derived from new research by 19 contributors and two research assistants in nearly 1,500 pages of text. Their distillation of such a quantity of primary source material ensures that this volume will remain an authoritative work of reference for many years to come. The new research is set in the familiar framework of the preceding volume IV covering the years 1500-1640 (published in 1967 and also edited by Dr Thirkirk) so it is no surprise that regional farming systems and the social structure of the rural economy are uncoordinated and lack an interpretive framework (which could have been found in the extensive geographical literature on farming regions).

The second book consists of a series of long thematic essays, with chapters on prices, wages and profits, landlords and estate management, market gardening, the diffusion of agricultural innovations, agricultural marketing, agricultural policy, and rural building – a rather partial coverage of "agrarian" matters perhaps, although these topics are complemented by some of those in the previous volume (on farm labourers and enclosure for example).

Two essays, by Chartres on marketing and Thirkirk on agricultural policy, open up relatively neglected areas of agrarian history with impressively wide-ranging investigations which set a very high standard for those who will be stimulated to follow in their footsteps. The chapter by Clay on land-

lords and the richly illustrated chapters on rural buildings, by Barley for England and Smith for Wales, are less novel but are nevertheless excellent surveys of the primary and secondary material. The weakest contribution is the commentary on the compendium of agricultural prices (although the new statistics will be useful) which has an uncertain grasp of the secondary literature and too frequently drifts away from the seventeenth century into the abstract and unreal world of the neoclassical economist. It is difficult to imagine an illiterate 17th-century farmer, whose "rational" was defined as by the market, drawing up his farm accounts, projecting long-term price trends, and adjusting his farm enterprise accordingly.

While these economic assumptions are very conspicuous in this chapter they are also implicit in Joan Thirkirk's interpretation of the period, underlying her narrow action of "depression" as a spell of low prices for grain producers. Certain aspects of farmers' behaviour (such as their economic rationality and price responsiveness) are merely assumed when, in this period at least, they need to be demonstrated. Thus the tone of this volume is more likely to appeal to the agricultural economist than the rural sociologist, although neither would regard it as an overly theoretical book. But they, and all those with an interest in farming, agricultural history, or the history of England and Wales during the century after 1640 will find the opportunities here for a rich harvest provided they are prepared to make the effort to reap it.

Mark Overton

Dr Overton is a lecturer in geography at the University of Newcastle.

History Paperbacks from Oxford

Henry V

The Practice of Kingship

Edited by G. L. Harriss

This collection of essays presents a portrait of late medieval kingship at its most effective. It is the first scholarly appraisal of Henry V as a ruler, and his government in general, to appear for over fifty years. £8.95, 0 19 873079 9

Renaissance and Renewal in the Twelfth Century

Edited by Robert L. Benson and Giles Constable, with Carol D. Lanham

Written by outstanding scholars in a variety of fields, twenty-six studies re-examine all that was new and vital in the twelfth century, and all that drew its inspiration from a lost past. £12.50, 820083 8

Reason and Society in the Middle Ages

Alexander Murray

A summary cannot begin to do justice to the liveliness and virtuosity of the book. Far from being dry or abstract scholarship, it is full of entertaining anecdote and fresh speculation on many aspects of medieval history. £12.50, 821986 7

The Dissenters

From the Reformation to the French Revolution

Michael A. Watts

A fascinating study, broad in conception and scholarly in execution, firmly grounded in the immense literature produced over the years by dissenters and their critics... Dr Watts has given us here an absorbing chronicle of the power and pervasiveness of the human spirit. £12.50, 822866 9

The Glorious Cause

The American Revolution 1763-1789

Robert Middlekauff

'The story of the war between Britain and America is brilliantly told... Middlekauff writes with wit, clarity and compassion. I do not know of anything better or faster moving.' J. H. Plumb in *The Sunday Telegraph*. £9.95, Oxford Paperbacks, 0 19 503575 5

England 1870-1914

Sir Robert Ensor

'A work of outstanding merit... it deserves the widest possible audience for the high qualities it reveals on every page.' *New Statesman*. 'A remarkable achievement...' *The Sunday Times*. £8.95, 0 19 821721 8 Oxford History of England

Labour in Power 1945-1951

Kenneth O. Morgan

'A remarkable achievement of political history.' A. J. P. Taylor. 'This is history at its very best.' *New Society*. 'It will be required reading for students of modern history for at least a generation to come.' *The Economist*. £8.95, 0 19 285150 0, Oxford Paperbacks

The Expansion of International Society

Edited by Hedley Bull and Adam Watson

'This constitutes a splendid achievement; both as a rich repository of information and analysis... and as a detour of reflection about the political state of our world and its chances, in the long run, of holding together.' *The Times Literary Supplement*. £12.50, 0 19 821997 0

British Empire in the Middle East 1945-1951

Arab Nationalism, the United States, and Postwar Imperialism

W. R. Louis

'The story he tells is an enthralling one... the author has used the British archives with great industry and has produced a work which may be read with pleasure and profit by students of the Middle East, of British foreign policy, and of the imperial saga.' *The Times Literary Supplement*. £15.00, 0 19 822980 7

Lenin and the Problem of Marxist Peasant Revolution

Esther Kingdon-Mann

'A scholarly, balanced, critical yet sympathetic study of the problem of how Lenin dealt with the prospect of peasant revolution in Russia throughout his revolutionary career.' *Choice*. £10.95, OUP USA, 0 19 533518 2

Revival and Reaction

The Right in Contemporary America

Gillian Peele

'Gillian Peele is now directing our gaze to Eighties America and unfolding the lineaments of a world in which Rightness is all... her subject is as superbly topical as her treatment is shrewd and knowledgeable.' H. G. Nicholas in *The Times Higher Education Supplement*. £8.95, 0 19 821322 5

Essays in Social History

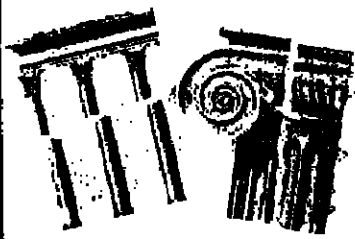
Volume 2

Edited by Pat Thane and Anthony Sutcliffe

This new collection gathers together the best work in social history published in essay form in the past decade. Analyses why social history has expanded so much in the last ten years; why the expansion has taken the form it has; and how and why these forms have differed from the expectations of ten years ago. £25.00, 0 19 873078 0 £9.95, Paper covers, 0 19 873078 2

Oxford University Press

Intellectual History from Cornell



HISTORY AND CRITICISM

By Dominick LaCapra. Focusing on the relationship between intellectual and social history, LaCapra succinctly formulates the problems of interpretation in history, and he assesses the current state of research and reflection in historiography. \$19.25

Also of interest...

RETHINKING INTELLECTUAL HISTORY
Texts, Contexts, Language
By Dominick LaCapra.
\$17.55 paper, \$46.75 cloth

MODERN EUROPEAN INTELLECTUAL HISTORY
Reappraisals and New Perspectives
Edited by Dominick LaCapra and Steven L. Kaplan. \$18.65 paper

WAGNERISM IN EUROPEAN CULTURE AND POLITICS

Edited by David C. Large and William Weber. "This interesting volume of six essays with an introduction and conclusion traces some of the ramifications of Wagnerism both as an organized movement and as an artistic and intellectual influence in several countries."—James Joll, *New York Review of Books*. "Rich in suggestions and insights."—*New York Times*. \$16.45 paper, \$37.95 cloth

PANOFKY AND THE FOUNDATIONS OF ART HISTORY

By Michael Ann Holly. A comprehensive interdisciplinary account that places Panofsky's intellectual heritage in the wider context of late 19th- and 20th-century humanistic theory, this book presents new concepts in the theory of history and the philosophy of culture. \$8.75 paper, \$27.45 cloth

BREAD AND CIRCUSES

Theories of Mass Culture as Social Decay
By Patrick Brantlinger. In this provocative critical survey of the most influential and representative theories of mass culture, Brantlinger ranges widely: from Greek and Roman origins, through Marx, Nietzsche, Freud, Ortega y Gasset, T. S. Eliot, and the theorists of the Frankfurt Institute, down to Marshall McLuhan and Daniel Bell. \$10.95 paper, \$29.65 cloth

THE DISCOURSE OF MODERNISM

By Timothy J. Reiss. "Challenging and rewarding. . . In the issues it raises, in the historical illumination it brings, and in many of its readings, *The Discourse of Modernism* remains an effort of substantial intelligence and interest."—*Modern Language Notes*. \$14.25 paper, \$31.75 cloth

CORNELL UNIVERSITY PRESS

c/o Trevor Brown Associates, Suite 7B, 26 Charing Cross Road, London WC2H 0LN England

BOOKS

HISTORY

Sense of déjà vu

The French Nobility in the Eighteenth Century: from feudalism to enlightenment
by Guy Chaussinand-Nogaret
translated by William Doyle
Cambridge University Press, £22.50 and £7.95
ISBN 0 521 25623 2 and 27590 3

When this book was first published in French in 1976, the English reader might have been forgiven for feeling a distinct sense of déjà vu. It was remarkable that Guy Chaussinand-Nogaret had laboured long and hard to reach the same general conclusions that English-speaking historians had reached and published during the preceding decade. In this version, the translator has provided a discreetly entitled "supplementary bibliography" of English titles which obscures the author's ignorance of them.

This is an interesting illustration not so much of the isolation of some national currents of research (though it is certainly that) as of the way in which the inadequacies of a previously accepted scholarly orthodoxy can be contested by simultaneous though quite separate revision. Yet, to say that English-speaking historians got to the general conclusions first is not to deny the merits of this book.

This is a lucid, sensible, well-documented study which further destroys the vision of the pre-revolutionary nobility as a homogeneous class, parasitic, entrenched behind privilege which it alone possessed and occupied a feudal relationship to the economy. Rather we discover here a nobility deeply split upon lines of wealth, influence and marriage alliance; a nobility in which, after 1760, notions of individual merit were rapidly replacing corporate notions of heredity and worthiness; a nobility whose elite was merging with non-noble elites and whose attitudes to state and society were increasingly reformist.

None the less, there are serious defects in the analysis which brings the author to see the nobility and the middle class essentially allied on a common programme in 1789. In the first place, the author carefully demonstrates the irreparable fragmentation of the nobility; yet at the same time he proceeds to argue about the outbreak of the Revolution in terms of a single noble attitude or programme. Similarly, in his discussion of the ancien régime, he has a lot to say about the very rich and the very poor nobles, but little to say about the well-to-do and the comfortably off provincial nobles. His argument about the fusion of elites through marriage and ideas seems principally to concern the great nobility of court and capital. Yet, by and large, there was real resistance to the Revolution here.

One cannot escape the feeling that there was an influential provincial nobility which retained attitudes that we think of, perhaps in caricature, as "noble". This becomes important in my second criticism. The author uses the noble *cahiers* to show that the nobility shared a common reform programme with the third estate. Much of this is irrefutable but the crucial question is the meaning of reform, especially in terms of noble perceptions of the future of their power and rank.

The issue of vote by head or by order illustrates the problem well. The author discovers that 41.04 per cent of *cahiers* demand vote by order (ie to preserve noble rank and access to future power intact) and 8.2 per cent demand vote by head. However, a substantial number take up intermediary positions of some voting by head or of acquiescence in vote by head. Chaussinand-Nogaret lumps all that is not a demand for vote by order as an acceptance of equality with the third estate with the result that he sees a majority to be liberal on this central issue.

This is unjustifiable. The fact that nobles are prepared for vote by head

on some issues like taxation or are prepared to see vote by head if the alternative is the destruction of the Estates-General does not make noble opinion liberal or egalitarian. The widespread willingness to abandon tax privilege (the least exclusively noble of privileges) when confronted by royal bankruptcy and the chance to end absolutism does not make them liberal or egalitarian either. There are better issues to test real attitudes — only six *cahiers* demand equality of access to public offices and only four wish to open army commissions to the third estate. Chaussinand-Nogaret is on really thin ground when he concludes that "the others, who declared no view, had at least given up their comfortable certainties and left the boldest to speak in their name."

This book certainly points to the structural and intellectual confusions and contradictions in the nobility. This is why the second estate fell apart in 1789. But he is being too hopeful in inviting us to see a liberal, generous, individualistic nobility. In a postscript for this edition, he does try to confront the question of why so many nobles turned against the Revolution. He ends up by saying that the nobility elected the least appropriate representatives to the Estates-General. One might equally well say that the *cahiers* (produced by the same assemblies) did not represent its views either.

Colin Lucas

Dr Lucas is fellow and tutor in modern history at Balliol College, Oxford.

Powers of the bench

The Justices of the Peace 1679-1760
by Norma Landau
University of California Press, £40.50
ISBN 0 520 04623 4

Few would contest that the major outcome of the constitutional struggles of the 17th century was the triumph of England's landed elite. The institution which represented them nationally, parliament, has long been an object of attention for historians of the late 17th and 18th centuries, and much has been published on political struggles there. Equally, it has long been recognized that this ascendancy of peers and gentry at Westminster was matched by their ascendancy in the localities, and that this local ascendancy was epitomized in the office of justice of the peace. So far, however, little work has been done to explore either the working of local government or the office of justice in the century after the Restoration. While such matters have provided the themes of numerous studies dealing with the century or so before 1660, the century before 1760, probably because there was no civil war to explain at the end of it, has attracted far less attention.

Professor Landau's book, therefore, provides a reconnaissance in strength into what in many ways an historical *terra incognita*. She defines and explores a wide number of issues, all of them illustrated by a solid core of evidence relating to the magistracy of Kent. Thus the impact of national party and local faction politics upon the bench, the actual work of the justices, and the nature of the social composition of the magistracy are all discussed at length. As far as the description of the justices' work is concerned, Landau's great contribution is to demonstrate in detail what has long been suspected, that in local administration and law enforcement the county quarter sessions were effectively replaced by divisional petty sessions and by the justice working through summary conviction. The growth of the justices' local powers is encapsulated neatly in Landau's calculation that the seventy or so offences open to summary conviction in 1663 had risen to over two hundred by 1776. As for the social composition of the bench, Landau contends that by the terminal date of her study the traditional dominance of great gentry families was being diluted, at least in the urbanizing areas just south of London, by the arrival of new justices who owed their existence to activities other than that of landowner.

Perhaps the most important, and intriguing theme, however, is Landau's use of her material to argue for changes in the way in which political authority in England was exercised: indeed, she performs the difficult feat of combining the political universe delineated by Sir Lewis Namier with that sketched more recently by Edward Thompson. Her argument is that her period witnessed a transition away from a "paternal" rule, in which the justice's authority rested on his prestige and power as a private individual within his locality, to a "patrician" rule, in which the justice's power was expressed in a more distanced and disinterested fashion.

If there is one major criticism to be made of this book, it is that this transition was not elaborated and discussed more fully in a concluding chapter; which would have performed the same digestive function for the 20th-century intellect as did part in the aftermath of a Hanoverian justice's dinner. A number of elements in this transition are raised briefly, only to be lost sight of. The different perceptions of the justice's role given in Richard Burn's 18th-century JP's handbook

and that given by such earlier writers as Lambarde and Dalton might, to take one example, have been examined in greater depth. Nevertheless, this remains an important and excellent book, offering a convincing exploration of what is in many respects new ground, and based on the application of a lively and imaginative intelligence to an impressive bulk of archival material. Perhaps its greatest contribution, however, lies in the possibility that it might encourage the writing of other works on local administration in the same period. One can only hope that they will be of a comparable quality.

J. A. Sharpe

J. A. Sharpe is lecturer in history at the University of York.

The Royal Commission on Historical Manuscripts has issued a new volume in its series of Guides to Sources for British History, *Private Papers of British Diplomats 1782-1900* (HMSO, £5.95).

Prostitution in Medieval Society

The History of an Urban Institution in Languedoc

LEAH LYDIA OTIS

In this pioneering work of social history, Leah Lydia Otis reveals profound changes in the perception of prostitution. Prostitution in the Middle Ages was a recognised, if not particularly respected profession, which was largely institutionalised.

Women in Culture and Society series
£18.95 Hardback 240pp 0-226-64032-9

The Great Devonian Controversy

The Shaping of Scientific Knowledge among Gentlemanly Specialists

MARTIN J.S. RUDWICK

'This is a definitive study — a work which is going to be accorded classical status.' *Nature*
... a fascinating book . . . clearly confirms his place as a leading figure in the world of the history and philosophy of science. *New Scientist*

£33.95 Hardback 494pp illus. 0-226-73101-4

Women, Family, and Ritual in Renaissance Italy

CHRISTIANE KLAPISCH-ZUBER

(translated by Lydia G. Cochrane)

A brilliant historian of the Annales school, Christiane Klapisch-Zuber uses the records of tax collectors and households to piece together a vivid picture of family life in Renaissance Italy.

£23.50 Hardback 368pp 0-226-43925-9

Britain in Transition

The Twentieth Century

(Fourth Edition)

ALFRED F. HAVIGHURST

This new edition extends and brings up to date the story of the political, economic and social change in Britain. An entirely new chapter covers the Thatcher years.

£12.75 Paperback 692pp 0-226-31970-9

THE UNIVERSITY OF CHICAGO PRESS

126 Buckingham Palace Road, London SW1W 9SD

BOOKS

HISTORY

A new diaspora

German-Jewish Refugees in England: the ambiguities of assimilation
by Marion Berghahn
Macmillan, £20.00
ISBN 0 333 25356 6

Beyond the conventional wisdom that they made a remarkable contribution to Britain's economic and cultural life, particularly well-attested in such fields as business and music, there has been little systematic study of the experience of the Jewish refugees who came to this country to escape Nazi persecution.

Beginning as a trickle in the early thirties, Jewish emigration from Central Europe had become a major movement of population by 1939. It has been estimated that between the Nazi seizure of power in 1933 and the outbreak of the Second World War, a total of 226,000 Jews fled Germany, to which were added a further 134,000 to 144,000 who fled from Austria and Czechoslovakia. Britain was one of the main destinations for those taking part in this new diaspora and, as elsewhere, the Government soon began to fear a greater flood of immigrants than could easily be accommodated given the still

high levels of unemployment and the views of some professional bodies, such as the British Medical Association, that there were few vacancies available even for well-qualified refugees. None the less, in comparison with other countries, Britain maintained a relatively generous policy, some 36,000 refugees, the great majority of them Jewish, being admitted into the country before hostilities began.

The Government's position, however, was one which virtually required Anglo-Jewish and other sympathetic bodies to take on most of the organization and expense of dealing with the new immigrants. Fortunately, many non-Jewish people offered what help they could in a climate where, as A. J. P. Taylor has remarked, the Nazi treatment of the Jews "did more than anything else to turn English moral feeling against Germany". For example, ex-Fremier Baldwin came out of retirement to launch an appeal on behalf of Jewish refugees, while Harold Macmillan not only took a full part in the Parliamentary Committee on Refugees as well as other semi-official organizations, but also used his own resources and those of neighbours to shelter forty men and women, mostly Jews, at his home in Sussex.

A significant number of the Jews coming to Britain were transmigrants, intending to move on to the United States, Palestine, or elsewhere, but who found themselves trapped by the coming of war. With the end of hostilities some of these people continued their journeys or even returned to the Continent. A substantial number, however, some 50,000 or more, were to remain as permanent residents. Marion Berghahn gives a sophisticated and sensitive portrayal of the problems of assimilation encountered

by the refugees, based upon interviews with almost two hundred people of all ages, groups including the children of refugee parents. In these interviews she has derived a more complex picture than is commonly assumed about their experiences.

The Jewish refugees to Britain brought with them a complex identity, part Jewish, part German, itself the product of years of assimilation in their European homelands. By the British, they were met with ambivalence, evident sympathy on the part of some, while others feared competition for jobs and were quick to display only barely concealed xenophobia at the least real or supposed signs of ingratitude or lack of deference among the newcomers. They in their turn had to grapple with the inevitable problems of refugees of all ages, finding work, somewhere to live, and re-establishing their lives in a new and often alien environment. Language, for many of the older generation of refugees especially, remained an insuperable handicap to positions of commensurate status to those they have previously held. Culturally too, for some of the more sophisticated, cosmopolitan refugees, the Britain of the thirties seemed irretrievably provincial, encouraging many to return to Europe after the war or move on to the more receptive climate offered by the United States, particularly for artists and architects.

Evidently it was the "Continentalness" of the German-Jewish refugees which created greater barriers to their full assimilation into British life rather than their Jewishness. Different tastes in food, clothes, even in furnishings and room arrangement created sometimes unbridgeable gaps. What emerged, as this most lucid study suggests, was not a total absorption into the majority culture into which the refugees were thrust, but the forging of a new cultural identity which integrated elements of the old and the new and was identical with neither. However immense their contribution to British life, many of the refugees and their descendants were to remain "Continental" Britons.

John Stevenson

Dr Stevenson is reader in history at the University of Sheffield.

Cultural shifts

Popular Culture in Seventeenth-Century England
edited by Barry Reay
Croom Helm, £19.95
ISBN 0 7099 2268 X

In this series of essays "culture" is defined in the anthropological sense of a system of shared values and patterns of behaviour, and "popular", somewhat innocently, as non-elite. Some essays are new, some revised or familiar from earlier work of the authors. Some represent attempts at synthesis of existing studies, some offer valuable new evidence. Most offer bold, some perhaps bald, overviews of their chosen topic.

The volume opens with two case studies of urban popular culture. Peter Burke's attempt to comprehend the rich diversity of London popular culture will be familiar to readers; Jonathan Barry's study of Bristol is refreshingly new and takes issue with current thinking on shifts in urban culture. In an essay notable for the absence of much discussion of popular culture, Barry argues that in Bristol a strong communal and civic identity prevented any clear division between popular and elite culture. By contrast Barry Reay's essay on popular religion, largely a work of synthesis, offers considerable evidence on the rich diversity of popular religious beliefs.

Diversity is also the hallmark of Bernard Capp's study of popular literature. Here, an essay with some sensitive analysis of the content of this literature is perhaps weakened by a failure to discuss whether it represented culture from, or for, the people. Clearly, before historians can mine this rich source the problems of the provenance of the texts and the relationship between reader (or listener) and text requires more critical discussion.

Sex and marriage which provided much of the copy for ballad-mongers is the focus of Martin Ingram's essay. This is a short article which packs a powerful punch. Quietly but convincingly dismissing some of the more sensational studies on this theme, Ingram shows that shifts in popular marriage practices and attitudes to extra-marital sexuality in response to deteriorating economic conditions took place in a society where public and communal control of sexuality within a Christian context was established well before the early modern period. A second essay by Ingram on the rituals of *charivari* and mocking

rhymes demonstrates the boisterous popular self-policing of this sexual culture. This was condoned by authority, or so Ingram would argue, since it addressed key areas of gender roles on which the more directly political relationship of superior and inferior was modelled.

In an essay on the people and the law, James Sharpe argues the centrality of the law for this relationship between rulers and ruled. Popular attitudes to the rule of law, despite the obvious advantages of its acceptance within popular culture to those in authority, remain less certain. These form something of the basis of Buchanan Sharp's essay on popular protest. Sharp focuses on those forms of disorder which concerned protest over rights of subsistence, protests which he sees, perhaps unwisely, as largely the work of wage earners, a label which itself does some injustice to the realities of the 17th century. Significantly, Sharp's treatment of these riots seems to represent a shift away from his earlier tendency to see them as class-based and back towards a greater acceptance of the value of the concept of the "moral economy" in explaining the form they took.

Taken together, these essays represent a significant maturing in the writing of the social history of early modern England. In contrast to earlier discussions under the label of popular culture, they extend the range of topics thought worthy of discussion, rescuing it from the restrictive association with ritual and festivals in some social history and moving it closer to a fuller anthropological usage. Other topics might have been discussed, notably those differences of cultural experience based on gender, age and region. Beyond this, there lies the larger, and more difficult, problem of the appropriateness of the equation of popular with non-elite. There is scope for historical studies of culture to challenge the neatness of the anthropological distinction between "great" and "little" traditions. And there are problems of which social groups "popular" should include in a society and century which saw increasing social differentiation, a process which gave an increasingly restrictive definition of "the people". These are problems the volume tends to skirt. But while individual authors emphasize the cultural continuities with a medieval past, there is clearly scope for a volume that would tackle the 17th century as a period of cultural differentiation.

None the less, the appearance of this volume, despite the poor quality of its print and production, is something to celebrate.

John Walter

John Walter is lecturer in history at the University of Essex.

Allen & Unwin HISTORY

Britain and Joseph Chamberlain

Michael Balfour

An important look by a distinguished author which adds to the evaluation of Chamberlain as an historical figure the perspective provided by the considerable amount of recent writing about Britain in the later nineteenth century, especially in the economic and social fields. Likely to become required reading for students of nineteenth-century political history.
October 1985 Hardback £20.00

British Food Policies During the

First World War

L. Margaret Barnett

Because of the exceptionally high proportion of imports in Britain's food supply and determined efforts of the enemy to sever the supply lines, efficient management of food resources was an essential element in the British national war effort. This book fills a gap in the historiography of the period by examining a vital aspect of government strategy.
September 1985 Hardback £26.00

Burke's Reflections on the Revolution in France

F. P. Lock

The first full-length treatment of one of the major texts in the western intellectual tradition. Written in response to the outbreak of the French Revolution, Burke's *Reflections* has survived as a classic of conservative thought and continues to attract readers for its historical value, for its political wisdom and for its magnificent style.
August 1985 Hardback £18.00

Unwin Critical Library

Egypt

Politics and Society 1945-1984

Derek Hopwood

Second Edition

'a comprehensive introductory survey of modern Egypt which manages to be both balanced and judicious and stimulating and provocative of further thought and enquiry.'
Arab Gulf Journal
April 1985 Paperback £8.50

Fire-Power

British Army Weapons and Theories of War 1904-1945

Shelford Bidwell and Dominick Graham

'an account of technical and typical change that is as entertaining as it is well-researched.'
Military Review
July 1985 Paperback £8.95

Allen & Unwin

(Publishers) Ltd

PO Box 18, Park Lane

Hemel Hempstead, Herts HP2 4TE

(0509)

New Archaeology Titles

Exploration of a Drowned Landscape

Archaeology and History of the Isles of Scilly

Charles Thomas

The Isles of Scilly are to this day being submerged by a rising sea level: this provides the background to this the first full-scale study of an area rich in archaeology. The author covers almost every aspect of the archaeology, including the first human settlements, the intricate process of place-name creation and the story of Christianity lavishly illustrated with maps, line drawings and photographs, this is an authoritative and exciting work.

£19.95 Hb 320pp 131 illus 07134 48520 Available

Guide to the Archaeological Sites of Britain

Peter Clayton

This selection of the 'top' sites (250 in all, 150 illustrated) in Britain is an indispensable and unrivalled guide which can be used in the field or read for pleasure at home. Over the nine years that have elapsed since the first edition of this guide, many new sites have been found, excavated and destroyed. These changes have been incorporated into the new edition, which will surely earn the same wholehearted praise from reviewers who commended the usefulness and readability of its predecessor.

£14.95 Hb 07134 48431 £9.95 Pb 07134 4844 X
240pp 180 illus October

Interpreting the Landscape

Michael Aston

Using old maps and documents, as well as his own and others' fieldwork, the author has prepared a study of the complex and dynamic history of the countryside. Archaeologists, historians and geographers, as well as anyone performing a local study or interested in Britain's historic environment will find this an informative introduction to landscape archaeology. The wealth of illustrations ensures that the points discussed are brought clearly to life.

£14.95 Hb 07134 36492 £9.95 Pb 07134 36506
192pp 121 illus Just Published

Batsford

4 Fitzhardinge Street, London W1H 0AH (01) 486 8484

Investigating Old Buildings

Lance Smith

A well-researched, informative handbook in which the author explains how to determine the methods of construction, material content and probable use and occupancy of old buildings. He provides thorough information on fieldwork techniques, research sources, equipment and the different methods for recording finds. Illustrated with excellent plans and line drawings, this book will be of value to archaeologists, architects, and students and keen amateurs in this field.

£14.95 Hb 07134 36336 £9.95 Pb 07134 36344
160pp 52 illus November

The Port of Roman London

Gustav Milne

Between 1979 and 1982 excavations directed by Gustav Milne exposed the port of Roman London. The scale of the harbour development, stretching in time from AD50 to the fifth century, is dramatic. This study plots the development of this crucial area of the Roman city and concludes with a critical reappraisal of the role of this Roman provincial port. The text, edited by Gustav Milne, is written by the archaeologists who excavated the sites and the specialists who examined the site material at first hand.

£17.50 Hb 07134 43642 £9.95 Pb 07134 43650
176pp 99 illus October

Using Environmental Archaeology

Myra Shackley

The author confronts the question of how we can find out about how people lived in the past. In a strikingly original way chapters are not arranged chronologically but reflect distinct human activities, such as hunting, eating, moving. Each activity is illustrated by two or three examples taken from many geographical areas and historical periods. The countless techniques used by modern archaeologists are revealed in a highly readable manner.

£14.95 Hb 07134 43464 £7.95 Pb 07134 48504
192pp 69 illus Available

New for autumn 85

TUDOR IRELAND

Crown, Community and the Conflict of Culture 1470-1603
 by Steven G. Ellis
 Lecturer in History, University of London
 Paperback £8.95 net ISBN 0 582 49311 2 Due October

LONDON 1500-1700

The Making of the Metropolis
 Edited by A. L. Beer
 Lecturer in History, University of London
 and
 Roger Finke

Available from: The John Rylands University Library of Manchester
 Paperback £6.95 net ISBN 0 582 49436 2 Due November

THE TUDOR PARLIAMENTS

Crown, Lords and Commons 1485-1603
 Edited by A. L. Beer
 Lecturer in History, University of London
 Paperback £5.50 net ISBN 0 582 49190 8 Due November

New in paperback

MR SECRETARY PEEL

The Life of Sir Robert Peel to 1830
 Second Edition
 Norman Gash
 Lecturer in History, St Andrews University
 Paperback £12.50 net ISBN 0 582 49723 X Due October

Available Through Your Local Bookseller
 For more information, please contact: Catherine Barrett, Longman House, Burnt Mill,
 Harlow, Essex CM20 2PL. Inquiries on appropriate copies are available to lecturers within
 the UK; please write to the address above.

Longman

Fiscal Accounts of Catalonia under the Early
 Count-Kings (1151-1213)

THOMAS N. BISSON

Rivalled in importance only by the Domesday Book and Pipe Rolls, the
 fiscal accounts of the first three Catalan count-kings are an invaluable
 source for social and cultural history.
 Awarded the Premi Catalunya by the Institut d'Estudis Catalans
 £80.75 2 volume set 665pp illus. 0-520-04588-2

Rich and Poor in Grenoble, 1600-1814

KATHRYN NORBERG

This wide-ranging study analyses the relationship between the rich and
 the poor in seventeenth-century France at their closest point of contact:
 poor relief.
 £31.95 Hardback 384pp 0-520-05260-9

Muzhik and Muscovite
 Urbanization in Late Imperial Russia

JOSEPH BRADLEY

At the beginning of the twentieth century the streets of Russia's largest
 cities were allegedly swarming with vagrants, paupers and idlers. Where
 did this underclass come from, and what conditions favoured its growth?
 £31.95 Hardback 440pp illus. 0-520-05168-8

UNIVERSITY OF CALIFORNIA PRESS

126 Buckingham Palace Road London SW1W 9SD

The Making of Urban Europe, 1000-1950

PAUL M. HOENBERG & LYNN HOLLEN LEES

By tracing the large scale processes of social, economic and political
 change within cities, as well as the evolving relationships between
 town and country and between city and city, the authors present an
 original synthesis of European urbanization within a global context.
 Harvard Studies in Urban History
 £25.50 Hardback 416pp illus. 0-674-54360-2

A History of the Jewish People

Edited by H. H. BEN-SASSON

'Here is a work that triumphantly makes available the fruits of a
 wealth of learning and scholarship that will surely establish new
 standards for the presentation of research.'
 Times Literary Supplement
 £15.95 Paperback 1,232pp illus. 0-674-39731-2

The Literary Underground of the Old Regime

ROBERT DARTON

'The French Revolution was a continuous conflict between people as
 well as a battle of ideas, and anyone who wants to understand this
 people had better start with the work of Robert Darton.'
 New York Review of Books
 £16.75 Paperback 272pp 0-674-53657-6

HARVARD

UNIVERSITY PRESS 126 Buckingham Palace Road London SW1W 9SD

BOOKS
 HISTORYDefending
 Hanover

British Foreign Policy in the Age of

Walpole

by Jeremy Black

John Donald, £16.00

ISBN 0 582 49766 6

The Bells of Victory: the Pitt-Newcastle

Ministry and the conduct of the Seven

Years War

by Richard Middleton

Cambridge University Press, £25.00

ISBN 0 521 26546 0

Throughout the modern history of
 most nations questions of peace and
 war have been of momentous signifi-
 cance. They concern the security of the
 state, the salvation of governments,
 the morale of the people. In Hanover-
 ian Britain they brought into question
 the legitimacy of the dynasty, the
 stability of politics and society, the
 creation of an empire and the raising of
 the standard of rebellion.

The formulation and execution of
 "foreign policy" cannot be a rarefied
 activity, somehow divorced from polit-
 ical pressures and social realities. It is
 inextricably linked into them and to a
 very considerable degree determined
 by them. Astonishingly, these ques-
 tions have been for generations among
 the poor relations of Hanoverian his-
 toriography. These two books will not
 of themselves transform this distress-
 ing state of affairs but they should
 sharpen our appreciation of certain
 key themes and they do begin to ask
 some, at least, of the questions for too
 long ignored by professional scholars.

Both books very properly investi-
 gate the sources of diplomatic action
 and find it in the courts of the Hanov-
 erian monarchs. After all, diplomats
 were personally appointed by the

crown and paid out of the Civil List.
 They had their own channels of in-
 formation and influence. They were
 careful to retain supervision of the War
 Office and they prided themselves
 upon their military skills. Well they
 might! The electorate was a recent
 creation and its establishment had
 aroused considerable hostility in Cen-
 tral Europe. The Electors of Hanover
 used their power as Kings of England
 to protect their patrimony without any
 apology. Successive oppositions were
 quite right to denounce the sacrifice of
 British interests to those of Hanover.
 Such interests demanded consistent
 opposition to the rival naval, commer-
 cial and imperial powers of France and
 Spain. For that was needed the
 friendship of Austria, Prussia and
 Russia. Because of differences and
 rivalries on account of Hanover this
 was not always forthcoming.

Among the informal cluster of
 bodies and practices which collectively
 made up the political "system" of
 Hanoverian Britain there did not yet
 exist any countervailing source of
 power to that of the monarch. The two
 Secretaries of State were responsible
 to the King not to a party. Traditions of
 collective responsibility were un-
 known. Although military operations
 might be discussed at cabinet level it
 was less common to discuss naval and
 diplomatic issues. Much depended on
 the initiative, personality and power of
 individuals.

Even in peacetime, as Dr Black's
 lively and revealing study indicates,
 it was difficult enough for any minister
 to coordinate diplomatic activity with any
 consistency. And what Walpole was
 not able to achieve in time of peace the
 Elder Pitt was not able to achieve in
 time of war. Dr Middleton is at pains to
 emphasize in his careful study that
 there was never any prospect of Wil-
 liam Pitt stamping his personality on
 the conduct of the Seven Years War.
 When he assumed the premiership, the
 main outlines of the war had already
 been determined. Far from planning
 every move in some worldwide game
 of imperial chess he found it extremely
 difficult to command his own Admiralty
 and Ordnance. Did he not at least
 select and promote men in the right
 heroic mould, men like Wolfe and

Amherst? Alas, no. As he knew
 precious little about warfare, he left
 the military to appoint its own.

One is left a little sad at the
 knowledge that even William Pitt the
 Elder rarely looked beyond immediate
 needs. Nevertheless, what he surely
 did have was a sound conception of
 Britain's place in the world. From Dr
 Middleton's relentless narrative and
 painstaking research it is just a little
 too easy to forget that William Pitt was
 sustained by a commercial and imper-
 ial vision of Britain's future which he
 was able to some extent to commu-
 nicate to the political nation, albeit for a
 remarkably brief period.

Nevertheless, politics and diploma-
 cy had become too complicated for one
 politician, be it Walpole in peace or
 Pitt in war, to impose himself upon
 prevailing institutions and practices.
 Dr Black is an excellent and informa-
 tive guide to the world of Walpolean
 foreign policy and explains how it
 worked as well as it did, and at least as
 well as comparable structures in
 Europe. He goes further, however,
 and endeavours to demonstrate the
 purposes to which diplomacy was put:
 the defence of Hanover, the (admit-
 tedly ambiguous) enhancement of
 British commercial interests and the
 defeat of Jacobitism. On these issues
 there was never unity of sentiment in
 the political nation. Consequently,
 diplomatic questions were constantly
 in the forefront of political attention.

The real strength of the British
 diplomatic and military position was
 less the genius of its statesmen, though
 this should not be discounted, but the
 astonishing success of commercial
 capitalism, the availability of cheap
 money and the ability of the country
 rapidly to mobilize its resources. Dr
 Middleton touches on some of these
 issues but they require extended dis-
 cussion. Both books succeed in ex-
 posing to view the Hanoverian practices of
 war and diplomacy. They arouse,
 rather than satisfy, the need to place
 these in their political and social
 contexts.

Frank O'Gorman
 Dr O'Gorman is senior lecturer in
 history at the University of Manchester.

riants almost always work within a
 national framework, as in much of this
 volume, but in this period the state was
 often financially and politically debilit-
 ated, even under centralist rather than
 federalist systems, and real power
 tended to reside at the local or regional
 level. The opening of Latin America to
 foreign trade in the early 19th century
 raised questions of imperialism and
 dependence, yet the truly rapid expan-
 sion of foreign influence took place
 after 1870, and in writing economic
 history it is difficult to strike the right
 balance between the external sector,
 where sources are good, and the
 internal economy, where information
 is more fragmentary.

Such problems are handled, with
 varying degrees of success, in the core
 of this volume, which consists of two
 general chapters, by Safford on politics
 and ideology and Tullio Halperin Donghi
 on the economy, and eight on the
 individual Spanish American coun-
 tries. The complex political turmoil of
 some nations leads a couple of contri-
 butors into a rather tedious chronicle
 of revolt and revolution, with little
 reference to local social, economic and
 political structures. More successful
 are those who avoid a political narra-
 tive in favour of an interpretative
 essay, particularly Malcolm Deas who
 provides a whole range of refreshing
 insights in considering Venezuela,
 Colombia, and Ecuador. Elsewhere
 the relative stability of an individual
 country, like Chile, or Argentina
 under Rosas, allows authors to analyse
 the social and economic conditions
 which underpinned political power,
 while not neglecting the tensions which
 threatened it.

These chapters, along with Safford's,
 provide a good analysis of some of
 the important themes of 19th-
 century Latin American history, which
 as *caudillismo* in its different forms and
 the networks of patron-client and
 familial relationships on which influ-
 ence depended. We also learn some-
 thing of the workings of the internal
 economy, the role of forgotten people
 like artisans and mule-drivers, and the
 complexities of a rural society where
 themselves or local markets rather
 than for export. As Deas points out, in
 many localities the power of the land-
 owner, and the priest, was not un-
 challenged, and how this was
 changed must be noted to avoid

the high-table end of Renaissance
 society. Poetry touched the lives of so
 many of the upper classes, being part
 of their education, written to please or
 complement them, treating issues and
 events that concerned them, and often
 of binding together men and women of
 similar tastes or convictions across
 family and kinship lines; it was
 usually responsive to changing atti-
 tudes and expectations, but we need to
 hear the voices and read the signs.

Thus the very reasons why historians
 leave poetry alone become the
 grounds on which they should make
 use of it. Because poetry is so often a
 tissue of experience grafted onto a
 convention, its content so variegated,
 and its tones subtle and enigmatic, it
 can provide access to the complex
 emotional and intellectual life of long
 dead generations that should form part
 of a modern historian's understanding
 of the past. Professor Martines would
 like to see the emergence of a socio-
 literary school of writers, concerned
 also with the psychodynamics of social
 groups; that would begin by exploring
 the mental world of the influential
 classes of Tudor and Stuart England,

history was riven by the burning ques-
 tion of classification, which set the
 system-builders loyal to Linnaeus
 against Buffon, the enemy of any
 attempt to fix the abstractions of the
 human mind on the natural world; and
 in physics, there were running battles
 on many aspects of the fluid theories
 that were used to explain heat, light,
 electricity, and magnetism. Inevitably,
 such debates were complex, both in
 their strictly technical content and in
 their philosophical ramifications, and
 it is no small achievement to have
 treated them, as incisively and com-
 prehensively as Hankins has done, in
 fewer than 200 pages.

It is one of the considerable virtues
 of Hankins's book that it allows loose
 ends and lacunae to be plainly identi-
 fied. In particular, it points repeatedly
 to the historiographical challenges
 arising from the problem of identifying
 the place of science in the broad
 current of Enlightenment thought.
 What import did the scientific debates
 have in the eyes of the wider commu-
 nity that constituted the Republic of
 Letters? We can be sure, for example,
 that, as a purely literary philosopher,
 Edward Gibbon would have regarded
 the issues that riveted the attention of
 men of science as either tedious or
 irrelevant. Rousseau and Diderot, by
 contrast, had some scientific preten-
 sions and would have rejoiced at any
 dent that was made in the Newtonian
 world-view, although even they would
 not have engaged seriously with the
 technicalities that an onslaught on
 Newton demanded.

But go beyond these towering fi-

Science and the Enlightenment
 by Thomas L. Hankins
 Cambridge University Press, £20.00
 and £6.95
 ISBN 0 521 24349 1 and 28619 0

It is now almost half a century since
 Abraham Wolf published his *History
 of Science, Technology and Philoso-
 phy in the Eighteenth Century*. Re-
 markably, Wolf's 400,000 words are
 still in print, but a remorselessly de-
 scriptive style and a musty predilection
 for the gadgetry of science have long
 given the work a dated air. Thomas
 Hankins's treatment of science during
 the Enlightenment is at once more
 finely focused and altogether crisper.
 Cast as a study of the interaction
 between concepts and observation,
 with a due regard for social and
 cultural context, it also conforms to the
 best trends in recent historiography,
 although it achieves modernity and
 freshness without the modishness that
 has come to afflict much writing on
 18th-century science. Hankins has cer-
 tainly written, in part, for his disciplin-
 ary peers, but he has also kept in view
 the mainly pedagogical aim of the
 Cambridge History of Science series
 and produced a work of quite out-
 standing lucidity.

Science and the Enlightenment con-
 sists of a brief but notable introduction
 to the character of the Enlightenment,
 followed by five chap-
 ters, each devoted to a particular
 branch of science. Although the divi-
 sion by disciplines helps to give the
 book its clarity, it is not an easy
 structure on which to mount a sus-
 tained thesis. Accordingly, such broad
 matters as the role of science in the
 radicalization of the Enlightenment or
 the effect on scientific thought of the
 emergence of distinct national tradi-
 tions in culture are simply touched on
 in passing. Nevertheless, some strong
 impressions do emerge. Above all, the
 18th century is portrayed as an age of
 kaleidoscopic diversity in which even
 the basic principles to be followed in
 the study and interpretation of nature
 were at issue. Controversy erupted
 frequently on questions both great and
 trivial, dividing the enlightened from
 the unenlightened and, no less com-
 monly, splitting asunder the ranks of
 those who would have preened them-
 selves on their loyalty to the Enlighten-
 ment ideal of "reasonableness".

Among the great issues, none could
 rival, in either intensity or intellectual
 import, the debate surrounding the
 Leibnizian notion of *vis viva* (*mv*) as
 the quantity that was conserved in
 God's universe. But every science, it
 seems, was capable of raising con-
 troversy. Chemistry had its confronta-
 tion between Lavoisier and the phlogis-
 ticians (an episode that Hankins
 describes particularly well); natural

limited, the concept of peonage can
 oversimplify rural structures, political
 change in the capital might have little
 real importance, and significant social
 and economic developments could
 occur despite the absence of major
 lines of international commerce.
 But only half the volume is on
 Spanish America between indepen-
 dence and the late 19th century. The
 opening chapters, on the process of
 emancipation itself, supplement rather
 than supersede the standard textbook
 on the period, John Lynch's *The
 Spanish American Revolutions, 1808-
 1826* (1973). Lynch himself has in-
 corporated a lot of recent material into
 his new survey of the origins of
 independence, and D. A. G. Waddell
 provides a good synthesis of the inter-
 national context of the era, which
 Lynch's earlier book does not cover.
 However, one of the really noteworthy
 aspects of the *Cambridge History* so far
 is its treatment of Brazil, the largest
 country in the region, yet often some-
 what neglected in textbooks despite
 or perhaps because of, its distant
 Portuguese, monarchical, and African
 heritage. Until now there has been no
 succinct, reliable essay on Brazilian
 independence, and the standard En-
 glish-language survey of the Brazilian
 Empire (1822-89) was published in
 1958. Between them Leslie Bethell
 José Murilo de Carvalho, and Richard
 Graham have filled these gaps, main-
 taining the standards set by the chap-
 ters on Brazil in the earlier volumes. Is
 there any chance of Cambridge Uni-
 versity Press publishing a one-volume
 paperback history of Brazil, based on
 the chapters in the *Cambridge His-
 tory*?

Rory Miller
 Dr Miller is lecturer in Latin American
 history at the University of Liverpool.

Three of Martin Gilbert's historical
 atlases have been published in revised
 editions of Weidenfeld & Nicolson at
 £5.95 each. *The Jewish History Atlas*
 (first published in 1970) has been
 updated to include such aspects as the
 Jewish emigration from the Soviet
 Union. Similar revisions have been
 made to the *American History Atlas*
 (1970) and the *First World War Atlas*
 (1970).

BOOKS
 HISTORYAge of
 scientific
 reason

Science and the Enlightenment
 by Thomas L. Hankins
 Cambridge University Press, £20.00
 and £6.95
 ISBN 0 521 24349 1 and 28619 0

It is now almost half a century since
 Abraham Wolf published his *History
 of Science, Technology and Philoso-
 phy in the Eighteenth Century*. Re-
 markably, Wolf's 400,000 words are
 still in print, but a remorselessly de-
 scriptive style and a musty predilection
 for the gadgetry of science have long
 given the work a dated air. Thomas
 Hankins's treatment of science during
 the Enlightenment is at once more
 finely focused and altogether crisper.
 Cast as a study of the interaction
 between concepts and observation,
 with a due regard for social and
 cultural context, it also conforms to the
 best trends in recent historiography,
 although it achieves modernity and
 freshness without the modishness that
 has come to afflict much writing on
 18th-century science. Hankins has cer-
 tainly written, in part, for his disciplin-
 ary peers, but he has also kept in view
 the mainly pedagogical aim of the
 Cambridge History of Science series
 and produced a work of quite out-
 standing lucidity.

Science and the Enlightenment con-
 sists of a brief but notable introduction
 to the character of the Enlightenment,
 followed by five chap-
 ters, each devoted to a particular
 branch of science. Although the divi-
 sion by disciplines helps to give the
 book its clarity, it is not an easy
 structure on which to mount a sus-
 tained thesis. Accordingly, such broad
 matters as the role of science in the
 radicalization of the Enlightenment or
 the effect on scientific thought of the
 emergence of distinct national tradi-
 tions in culture are simply touched on
 in passing. Nevertheless, some strong
 impressions do emerge. Above all, the
 18th century is portrayed as an age of
 kaleidoscopic diversity in which even
 the basic principles to be followed in
 the study and interpretation of nature
 were at issue. Controversy erupted
 frequently on questions both great and
 trivial, dividing the enlightened from
 the unenlightened and, no less com-
 monly, splitting asunder the ranks of
 those who would have preened them-
 selves on their loyalty to the Enlighten-
 ment ideal of "reasonableness".

Among the great issues, none could
 rival, in either intensity or intellectual
 import, the debate surrounding the
 Leibnizian notion of *vis viva* (*mv*) as
 the quantity that was conserved in
 God's universe. But every science, it
 seems, was capable of raising con-
 troversy. Chemistry had its confronta-
 tion between Lavoisier and the phlogis-
 ticians (an episode that Hankins
 describes particularly well); natural

the high-table end of Renaissance
 society. Poetry touched the lives of so
 many of the upper classes, being part
 of their education, written to please or
 complement them, treating issues and
 events that concerned them, and often
 of binding together men and women of
 similar tastes or convictions across
 family and kinship lines; it was
 usually responsive to changing atti-
 tudes and expectations, but we need to
 hear the voices and read the signs.

Thus the very reasons why historians
 leave poetry alone become the
 grounds on which they should make
 use of it. Because poetry is so often a
 tissue of experience grafted onto a
 convention, its content so variegated,
 and its tones subtle and enigmatic, it
 can provide access to the complex
 emotional and intellectual life of long
 dead generations that should form part
 of a modern historian's understanding
 of the past. Professor Martines would
 like to see the emergence of a socio-
 literary school of writers, concerned
 also with the psychodynamics of social
 groups; that would begin by exploring
 the mental world of the influential
 classes of Tudor and Stuart England,

History
 in poetry

Society and History in English
 Renaissance Verse
 by Laura Martines
 Blackwell, £17.50
 ISBN 0 631 14115 4

"Can historians afford to neglect poetry?"
 is the central issue raised here.
 Historians rely on documents and
 factual data of all kinds, and are willing
 to use the imaginative prose of a period
 as historical evidence, but they tend to
 reject poetry as too subjective, elusive
 or untrustworthy. In consequence,
 they are in danger of losing touch with
 the consciousness of the age, so often
 vividly preserved in verse.
 Laura Martines sets out to alert his-
 torians to the potential of
 poetry as a highly instructive medium
 for registering the tensions of the social
 assignments that were taking place at

history was riven by the burning ques-
 tion of classification, which set the
 system-builders loyal to Linnaeus
 against Buffon, the enemy of any
 attempt to fix the abstractions of the
 human mind on the natural world; and
 in physics, there were running battles
 on many aspects of the fluid theories
 that were used to explain heat, light,
 electricity, and magnetism. Inevitably,
 such debates were complex, both in
 their strictly technical content and in
 their philosophical ramifications, and
 it is no small achievement to have
 treated them, as incisively and com-
 prehensively as Hankins has done, in
 fewer than 200 pages.

It is one of the considerable virtues
 of Hankins's book that it allows loose
 ends and lacunae to be plainly identi-
 fied. In particular, it points repeatedly
 to the historiographical challenges
 arising from the problem of identifying
 the place of science in the broad
 current of Enlightenment thought.
 What import did the scientific debates
 have in the eyes of the wider commu-
 nity that constituted the Republic of
 Letters? We can be sure, for example,
 that, as a purely literary philosopher,
 Edward Gibbon would have regarded
 the issues that riveted the attention of
 men of science as either tedious or
 irrelevant. Rousseau and Diderot, by
 contrast, had some scientific preten-
 sions and would have rejoiced at any
 dent that was made in the Newtonian
 world-view, although even they would
 not have engaged seriously with the
 technicalities that an onslaught on
 Newton demanded.

But go beyond these towering fi-

Science and the Enlightenment
 by Thomas L. Hankins
 Cambridge University Press, £20.00
 and £6.95
 ISBN 0 521 24349 1 and 28619 0

It is now almost half a century since
 Abraham Wolf published his *History
 of Science, Technology and Philoso-
 phy in the Eighteenth Century*. Re-
 markably, Wolf's 400,000 words are
 still in print, but a remorselessly de-
 scriptive style and a musty predilection
 for the gadgetry of science have long
 given the work a dated air. Thomas
 Hankins's treatment of science during
 the Enlightenment is at once more
 finely focused and altogether crisper.
 Cast as a study of the interaction
 between concepts and observation,
 with a due regard for social and
 cultural context, it also conforms to the
 best trends in recent historiography,
 although it achieves modernity and
 freshness without the modishness that
 has come to afflict much writing on
 18th-century science. Hankins has cer-
 tainly written, in part, for his disciplin-
 ary peers, but he has also kept in view
 the mainly pedagogical aim of the
 Cambridge History of Science series
 and produced a work of quite out-
 standing lucidity.

Science and the Enlightenment con-
 sists of a brief but notable introduction
 to the character of the Enlightenment,
 followed by five chap-
 ters, each devoted to a particular
 branch of science. Although the divi-
 sion by disciplines helps to give the
 book its clarity, it is not an easy
 structure on which to mount a sus-
 tained thesis. Accordingly, such broad
 matters as the role of science in the
 radicalization of the Enlightenment or
 the effect on scientific thought of the
 emergence of distinct national tradi-
 tions in culture are simply touched on
 in passing. Nevertheless, some strong
 impressions do emerge. Above all, the
 18th century is portrayed as an age of
 kaleidoscopic diversity in which even
 the basic principles to be followed in
 the study and interpretation of nature
 were at issue. Controversy erupted
 frequently on questions both great and
 trivial, dividing the enlightened from
 the unenlightened and, no less com-
 monly, splitting asunder the ranks of
 those who would have preened them-
 selves on their loyalty to the Enlighten-
 ment ideal of "reasonableness".

Among the great issues, none could
 rival, in either intensity or intellectual
 import, the debate surrounding the
 Leibnizian notion of *vis viva* (*mv*) as
 the quantity that was conserved in
 God's universe. But every science, it
 seems, was capable of raising con-
 troversy. Chemistry had its confronta-
 tion between Lavoisier and the phlogis-
 ticians (an episode that Hankins
 describes particularly well); natural

might learn from the commande-
 rary poems that helped to launch a new
 volume of verse or prose? More deli-
 cate issues arise over the interpretation
 of tone or of modes of address; syntax
 reveals the nuances of relationships;
 figurative language might be associ-
 ated with certain interest groups or
 religious trends. Metaphors often have
 an economic basis in trade, exploration
 or international affairs - Donne's
 mistress will reward an economic
 historian as well as a lover.

Although this book is aimed at
 historians, encouraging them to cross
 literary frontiers, its profusion of ideas
 about the semantics of Renaissance
 poetry and about the information that
 can be decoded from that poetry
 makes it of considerable interest to all
 involved in English Renaissance stud-
 ies. At times, however, the theorizing
 draws confidence more from its own
 generalizations than from the actuali-
 ties of verse. The few attempts at
 practical demonstration stay aloft for
 only a short time, but I have no doubt
 that longer flights can be achieved. I
 also imagine that the book's principal
 intended audience consists of histo-

Research and Studentships

KINGSTON POLYTECHNIC

FACULTY OF ENGINEERING
Centre for Research in
Computer Integrated Manufacture
POST DOCTORAL RESEARCH ASSOCIATE
Software Engineering in
Advanced Manufacturing Systems.

Applications are invited for the above post from mathematicians, computer scientists or control systems engineers with expertise or interest in formal mathematical methods for the specification, design and development of software, and their application to advanced manufacturing control systems. The project is SERC-funded and will be carried out in close collaboration with industry. Applicants should have, or be about to obtain, a PhD in a relevant subject area. Exceptionally, candidates without a higher degree but with considerable experience in a relevant discipline will be considered.

Starting Salary will be £8,688 including London allowance (pay award pending).

Further details and application forms from Personnel Officer, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE. Tel 01-549 1356 ext 287.

Closing date 1 Nov 1985.

(71104)

The Hatfield Polytechnic

School of Business and Social Sciences
Research Assistant

In Sociology of Language

To work on an ESRC - funded project "Language-Maintenance and vitality in the Scottish Gaelic speech-community" directed by Dr Kenneth MacKinnon. A graduate in an appropriate social science discipline is sought with strong interest or familiarity in this field. Gaelic speaking ability, computing skills and knowledge of standard research methods will be distinctly advantageous.

The appointment will commence on 1.1.86 for two years to 31.12.87. Remuneration will be on the first three points of the LEA Research Assistant 'A' scale (currently £5,445 - £5,888 - £6,335) including local weighting.

Further details and application forms from: Staffing Officer, Hatfield Polytechnic, PO Box 108, College Lane, HATFIELD, Herts AL10 9AB (Tel: 07072 - 79029) quoting reference: 012 to whom completed application forms should be returned by 28th October 1985.

(71120)

UNIVERSITY OF EAST ANGLIA

Norwich
RESEARCH POST IN ECONOMICS

Applications are invited for an ESRC-funded post to work on "An inter-industry study of multinational firms, structure, performance and trade in the European Research Centre. The successful candidate will join a team including Drs. Davies, Hughes and Lyons and other research staff from the Centre. Candidates should possess a postgraduate qualification in economics, preferably a PhD. (finished or near completion) or equivalent research experience. Previous experience in the broad area of the project may be an advantage but is not essential. The appointment is for two years and will be on the Research and Academic Staff Scale, initially in the range £7,220-£2,920 per annum (interim review). The appointment is to take effect as soon as is possible consistent with the successful candidate's other commitments.

Applications, together with the names of two referees, should be sent by 25 October 1985 to Dr S.W. Davies, School of Economics and Social Studies, University of East Anglia, Norwich NR4 7TA, from whom further particulars are also available.

(71105)

University of Warwick

Department of Computer Science

RESEARCH FELLOW

To work on an ICRS project entitled "Very large scale integrated systems: a survey of current research and its implications for the future". A survey of current research is being undertaken in the project. The post is available immediately for a period of up to 12 months. Candidates should preferably have a research background in computational logic and experience in implementing knowledge-based systems.

(Research Grade 1A: £7,330 - £12,150 p.a. under review).

Applications should send a curriculum vitae together with the names of two referees, as soon as possible, to Dr A.G. Cohn, Department of Computer Science, University of Warwick, Coventry CV4 7AL, England. Tel: 0203 84011. Ext. 2088 from whom further particulars may be obtained. (51993) H12

Durham University

DETECTOR MONITORING FOR TRAFFIC MANAGEMENT AND PLANNING

Applications are invited for a Research Assistantship funded by the Research Assistantship Scheme in the Department of Civil Engineering and Traffic Systems Group in the School of Engineering and Applied Science. The post is available immediately, for eighteen months.

The aim of the research is to identify efficient methods of handling and analysing road traffic detector data in order to improve the flow of traffic through urban areas.

Applicants should have a good degree, preferably in Engineering, Computer Science or Physics. A knowledge of statistics and a further degree in a related field would be an advantage.

Salary will be £7,920 - £9,975 on Range 1A of the Academic Staff Scale.

Applications (3 copies) naming three referees should be sent by 25 October 1985 to the Recruitment, Science Laboratory, South Road, Durham DH1 1TA, from whom further particulars may be obtained. (51993) H12

Translators

Italian Delegation to NATO

seeks

TRANSLATOR/INTERPRETER

Proficiency of English mother tongue, excellent knowledge of Italian and French will be required. Candidates should have a research background in computational logic and experience in implementing knowledge-based systems.

(Research Grade 1A: £7,330 - £12,150 p.a. under review).

Applications should send a curriculum vitae together with the names of two referees, as soon as possible, to Dr A.G. Cohn, Department of Computer Science, University of Warwick, Coventry CV4 7AL, England. Tel: 0203 84011. Ext. 2088 from whom further particulars may be obtained. (51993) H12

10AM MONDAY PRECEDING PUBLICATION

Miscellaneous

COUNCIL FOR EDUCATIONAL TECHNOLOGY

FOR THE UNITED KINGDOM
DIRECTOR

The Council for Educational Technology is concerned with the development and application of educational technology in all aspects of education and training throughout the United Kingdom. The present Director of CET will retire on 31 January 1986. The Council therefore seeks applications to fill this important post.

The Director of CET is responsible to the Council for the totality of its activity, including organising the business of the Council, developing the Council's strategy and programme policy in the light of the Council's overall policy decisions, controlling the implementation of the programme, acting as finance officer for the Council as a publicly funded body, and representing and speaking for the Council in the UK and overseas.

Applicants will need a high level of management experience, particularly in financial matters, a comprehensive understanding of the education and training systems of the UK, comprehensive understanding of information technology and high professional standing in the field of educational technology.

Salary in the range £23,669 to £28,301.

Fuller details of the post are available on application to the Chairman, CET, 3 Devonshire Street, London W1N 2BA.

Closing date 1 November 1985.

(71103)

Overseas

QUEENSLAND INSTITUTE OF TECHNOLOGY - AUSTRALIA

The Queensland Institute of Technology is a multi-disciplinary higher education institution with an enrolment of approximately 5,000 students and 1,000 academic and support staff. Brisbane, the city in which the Institute is located, is the state capital of Queensland and has a greater metropolitan population of 1.5 million people. It is a coastal city enjoying a mild climate similar to that of Southern Spain. The Institute has a traditional school department structure.

Applications are invited for the position of HEAD OF DEPARTMENT in the following areas:

ARCHITECTURE AND INDUSTRIAL DESIGN

The School of the Built Environment consists of the Department of Planning and Landscape Architecture, and the Department of Building and Quantity Surveying. The Department of Architecture and Industrial Design has over 400 students enrolled in its full and part-time courses in architecture and industrial design. It is anticipated that a new strand in interior design will be introduced in the full-time Bachelor of Applied Science (Built Environment) course in 1986.

The Head of Department is responsible for the academic leadership and administration of a full-time staff of 15 and a large part-time staff of local practitioners, in the fields of architecture, industrial design and interior design. Liaison with the professions is an important part of the work.

Applicants should possess a degree in architecture and a higher degree in architecture or a related field and should have either extensive experience of practice on a large scale or a substantial record of research publication. Teaching experience and appropriate administrative experience are also required.

Head of School - Mr T. Heath, Brisbane tel. (07) 223 2282.

Reference Number: T14785.

CIVIL ENGINEERING

The Department of Civil Engineering is one of the departments within the School of Engineering. The Department has an academic establishment of thirty-one staff and twenty-four support staff, eight of whom are employed by a vigorous Testing Services and Consulting and Continuing Education program. There are 360 students in the Department studying in bachelor, diploma, degree, post-graduate diploma and master by thesis programs. The Department is actively building up its post-graduate area which involves some forty students at the moment. In the next academic year it is planned to introduce a Master's Degree by Coursework and Project in the area of municipal engineering.

Extensive computing facilities are available through the central computer centre and the recent purchase by the School of Engineering of a VAX-11/780 CADD-CAS system, a suite of IBM personal computers and a micro-robot computer.

Applicants for the position of Head of this dynamic and versatile Department will have preferably a PhD or its equivalent and experience in tertiary teaching and the civil engineering profession. The appointee will exhibit the very high academic leadership and administrative ability necessary to lead a team of diverse professionals and to direct the academic development of the Department. The successful appointee will be innovative and entrepreneurial in approach and be able to demonstrate an active interest in the application of new technology to civil engineering. The appointee will be expected to become involved with the profession and the various aspects of civil engineering practice in Queensland.

Head of school - Dr John Conderoy, Brisbane tel. (07) 223 2415.

Reference Number: T14883.

Salary - Head of Department - \$AUS\$46,397 per annum.

Further information is available from the relevant Head of School.

Applicants should send the appropriate reference number together with full details including contact telephone numbers and the names and addresses of three referees should reach the Personnel Manager, Q.I.T., G.P.O. Box 2434, Brisbane, 4001, Australia, by November 22, 1985.

(51993) H12

QUEENSLAND INSTITUTE OF TECHNOLOGY

George Street, Brisbane (next to Botanic Gardens)
G.P.O. Box 2434, Brisbane, 4001.
AN EQUAL OPPORTUNITY EMPLOYER

TEACHERS COLLEGE

Columbia University

Applied Linguistics Assistant

Associate Professor
(Tenure-track)
Search Reopened

To teach basic courses, direct dissertation research, and train language teachers in the use of computers in the classroom. Candidates should have an optimal combination of a doctorate, published research; experience in language teaching, teacher training, administering academic programs; a track record in obtaining funding for and administering research projects; expertise with computers as they are used in research and language teaching. Send letter and vita by December 1, 1985, to Professor Clifford Hill, Program in Applied Linguistics, Box 9899, Teachers College, Columbia University, New York, N.Y. 10027. AVEDE.

(71107)

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

SYDNEY AUSTRALIA
Equal Employment Opportunity
is Institute Policy

SCHOOL OF ACCOUNTING

HEAD OF SCHOOL
\$A\$54,948 p.a.

The position of Head of the School of Accounting will become vacant in January 1986 upon the retirement of the present incumbent.

The School of Accounting is involved in teaching (at undergraduate and postgraduate levels), in research and in consulting in all areas of management accounting, financial accounting and auditing, and business law. The School places particular emphasis on computers in accounting education and has access to substantial CDP resources. The School also conducts, each semester, a number of continuing management education programs which are available to the business community generally. The School of Accounting is one of four Schools in a large Faculty of Business. The School currently employs some 25 full-time academic staff and is organised into three departments. Recently the Faculty moved into attractive new premises in the vicinity of the Darling Harbour Redevelopment site in the central Sydney area, and with the Institute Library also located on the same campus. As Head of School the appointee will be an ex officio member of the Academic Board of the Institute and of the Faculty Board and may be called upon in the future to assume the duties of Dean of the Faculty.

The person sought will have the capacity to provide academic leadership for and to administer a School covering a wide range of interests within the general fields of accounting, auditing and business law. Applicants should possess an appropriate higher degree together with substantial teaching and administrative experience in higher education. Since much of the work of the school is directed toward preparation for a professional career, experience in such work obtained directly or by acting as a consultant will be considered highly relevant.

Fares and a contribution toward removal expenses are provided for overseas appointees. A Housing Loan Scheme is also available. With consent of council, academic staff are permitted to undertake limited consulting work. Opportunity exists to contribute to superannuation.

Appointment will normally be with tenure or by way of a three year fixed term contract. Overseas appointees will be expected to enter into a service agreement to remain with the Institute for a minimum of three (3) years. An information sheet for applicants is available from the address below.

Closing date 22nd November, 1985.

Applicants should include full details of academic and professional background plus the names and addresses of three referees from whom confidential reports may be obtained. In reply please quote reference no. 85/188 and forward to:

The Director
N.S.W. GOVERNMENT OFFICE
86 STRAND
LONDON WC2N 5LZ

NEW SOUTH WALES GOVERNMENT

PREMIER'S DEPARTMENT

THE DIRECTOR

Royal Botanic Gardens and Domain
Sydney, Australia

Applications are invited for the position of Director of the Royal Botanic Gardens and Domain. The present Director retires at the end of this year. The Director is responsible to a Trust for the administration, management and development of all Trust lands and related activities, including the Royal Botanic Gardens and Domain, the partially developed Mount Tomah Botanic Garden and the newly acquired Mount Annan Native Botanic Garden and Arboretum. The Director is also responsible for the National Herbarium of New South Wales.

Applicants should have:

- Tertiary qualifications in an aspect of the plant sciences, experience in modern plant systematics and appreciation of ecology.
- A sound appreciation of the work and objectives of botanic gardens.
- Proven administrative skills at a senior level.
- An imaginative perception of public and scientific involvement in development of the Botanic Gardens and an ability to communicate at all levels.

Salary: \$A\$53,743 (under review) plus \$A\$668 p.a. expense allowance.

Conditions: The position offers permanent appointment to the Public Service and access to the State Public Service Superannuation Fund, subject to conditions. Normal service leave conditions apply, including 4 weeks annual leave.

General: Consideration will be given to assistance with fares and removal expenses for an appointee from interstate (or overseas). Applications close 22 November, 1985.

All applications should be marked "Confidential" and addressed to the Secretary, Premier's Department, State Office Block, Macquarie Street, Sydney, 2000 and should include the names of two referees. Further information may be obtained from Mr. J. Moore, Assistant Secretary, Premier's Department, telephone (02) 270 4456.

Equality of Employment Opportunity
is Public Service Policy.

PLEASE MENTION
THE T.H.E.S.
WHEN REPLYING TO
ADVERTISEMENTS

Overseas continued

REPUBLIC OF SINGAPORE

College of Physical Education
LECTURERS

The College of Physical Education is the only Tertiary Institution in Singapore engaged in specialist teacher training for physical education. It is an autonomous body responsible to The Institute of Education Council.

The College is inviting applications from suitably qualified and experienced candidates for a Lectureship position in the areas of Biological bases, Exercise Physiology and health related fitness.

The ability of candidates to contribute to the teaching of a variety of practical activities, some at an advanced level, is also highly desirable.

General Requirements:

1. Applicants should hold a Master's degree and/or have a specialist qualification -
2. In addition to the above, applicants should hold teaching diplomas or certificates and have at least 3 years' approved teaching or related teaching experience and experience in teacher education is desirable.

Remuneration: Approximate salary ranges, including National Wage Council (NWC) increases and housing allowance are as follows:

Single Officer: \$S\$42,378 p.a. - \$S\$88,563 p.a.

Officer Accompanied by spouse or children: \$S\$49,578 p.a. - \$S\$93,763 p.a.

(71116)

Officer accompanied by spouse and children: \$S\$49,578 p.a. - \$S\$93,763 p.a.

Other Benefits:

Other benefits applicable to the Lectureship position include loan scheme for the purchase of cars, medical benefits, children's education allowance and ex-gratia payment where applicable, and a monthly contribution by the College of 25% of the Officers' monthly salary plus education allowance towards the Central Provident Fund, subject to a maximum of \$S\$1,750 per month. The Officer will also have to contribute 25% of his salary plus education allowance towards the Central Provident Fund, subject to a ceiling of \$S\$1,250 per month. (The rates of contribution to the Central Provident Fund are subject to revision periodically).

Application:

Applicants should submit a full curriculum vitae with qualifications, experience, personal details and the names of 3 referees together with their letter of application as soon as possible to Mr. Alan Gray, Loughborough University of Technology, Loughborough, Leicestershire, LE11 3TU.

Formal application forms may be obtained from Mr. Guy if time permits. Interviews will be held at Loughborough on 25 October '85 and interviewees will be contacted by phone.

(71116)

Anglo-Spanish Joint Research Programme (Acciones Integradas)

The British Council invites applications in all academic disciplines for inclusion in the 1985/87 programme (1 May 1986-30 April 1987). This scheme was established in 1983 with the Spanish Ministry of Education and Science in order to promote the interchange of research experience between universities, polytechnics and research institutes in both countries through the award of travel and subsistence grants for joint research projects. Applicants must already have identified a Spanish project partner who should respond simultaneously to the current announcement being made in Spain by the Spanish Ministry of Education and Science. Projects which were awarded grants in 1985/86 must be ready if they wish to be considered for further funding. Projects which have already received awards for the last three years are not eligible for further awards.

Application forms and further information on the scheme may be obtained from: Higher Education Division (Acciones Integradas), The British Council, 10 Spring Gardens, London SW1A 2BN. Tel: 01-880 8486 (ext 2824).

The deadline for the return of completed forms is Friday 17 January 1986.



VALE UNIVERSITY, New Haven, Connecticut, will accept to professor (with tenure). Area of specialization: Kent and German literature. Appointment to begin 1987-88. Semester system. Equal opportunity/affirmative action employer. Professor Harry Frankfurt, Department of Philosophy, Box 2650, Yale University, New Haven, Connecticut 06520. (02224) H14

University of Natal

Department of Mathematics and Applied Mathematics
Durban

Applications are invited from suitably qualified persons for the position of Lecturer in the Department of Mathematics and Applied Mathematics.

LECTURER

The appointment carries an attractive salary package, details of which are obtainable from the Staffing Section on request (Tel: 031-8163308). The salary offered will be determined according to the qualifications and/or experience of the successful applicant.

Application forms, further particulars of the post and information on pension, medical aid, group insurance, service bonus, staff bursary, housing loan and subsidy schemes, long leave conditions and travelling expenses obtainable from the Secretary, South African University Office, Clarendon House, 278 High Holborn, London WC1V 7JE or the Registrar, University of Natal, King George V Avenue, Durban 4001, with whom applications, on the prescribed form, must be lodged and not later than 15 November 1985, quoting the reference 07/185. (51992) H14

Teach on Exchange in USA

Qualified British teachers/lecturers of all subjects with 5 years' experience currently teaching full-time in the UK are invited to apply for post exchange appointments to the USA during the 1986/87 academic year.

Teachers/lecturers are seconded on full UK salary with no contractual pension and social security rights safeguarded. Travel expenses and cost of living allowance are payable.

Further details and application forms (Form TEO 1/83), The Central Bureau, Seymour House, Seymour House, London W1A 8PE. Tel: 01-486 5101, Ext. 248.

The closing date for completed applications is 15 November 1985. (02208) H14

University of Queensland

CHAIR OF ACCOUNTING

Applicants should be distinguished scholars in financial or managerial accounting, preferably holding a doctorate from a major University and should have extensive experience in the above areas. The successful candidate would be expected to be capable of and active in encouraging and directing higher degree research in accounting. Duties will include teaching, research, supervising research, administration and involvement in professional activities. The Department is a continuing body with a continuing tradition and with business, government and commercial communities.

Salary: \$A\$4,948 per annum.

The University provides prescribed travelling and removal expenses, superannuation, housing assistance and studies program.

Closing date: 22nd November 1985. Reference No. 34485.

Additional information and application forms are available from the Secretary, Greater Association of Commonwealth Universities, 36 Bedford Square, London WC1H 0PE.

The University of Queensland is an Equal Opportunity Employer. (51991) H14

University Teachers required:

1) IN IRRIGATION AGRONOMY AND SOIL AND WATER MANAGEMENT

For 3 to 4 months starting January or February, 1986.

2) IN AGRICULTURAL SCIENCE AND SOIL CLASSIFICATION

For a two year period starting later in 1986.

For teaching M.Sc. and Ph.D. students at the Ahmadu Bello University, Zaria, Northern Nigeria.

Send application and C.V. to: Herdes-Isakabel, Danish Lead Development Service, P.O. Box 110, DK-8800 Viborg, Denmark. Tel: 45-6.686111. (51990) H14

York University

Faculty of Arts

ASSISTANT PROFESSOR PHILOSOPHY

The Department is currently limited. Qualifications: Ph.D. or equivalent in Philosophy. Teaching experience and publications. Main area of specialization must be in philosophy but must have interest and demonstrated competence in other areas of Philosophy as well. Duties: Undergraduate and graduate teaching and supervision. Appointment effective July 1986, pending University approval.

Applications, including curriculum vitae and at least three letters from academic referees should be sent to: Chairman, Department of Philosophy, York University, 4700 Keele St., North York, Ontario, Canada M3J 1P5. Application deadline: November 15, 1985. This advertisement is directed to Canadian citizens and permanent residents. (51777) H14

REMINDER
COPY FOR CLASSIFIED
ADVERTISEMENTS IN
THE T.H.E.S.
SHOULD ARRIVE NOT
LATER THAN 10AM
MONDAY PRECEDING
PUBLICATION